Cari Amici,

eccoci alla ventiduesima edizione del nostro Congresso Nazionale, con meno risorse economiche, meno tempo per stare insieme ma identico rigore metodologico e scientifico.

Apriremo i lavori con una sessione plenaria sulla chirurgia del tumore metastatico in urologia che, senza dubbio, ha cambiato connotati negli ultimi anni grazie ai trattamenti neoadiuvanti ed adiuvanti. Se pensate che vi sono, un paio di protocolli in corso, uno in Germania e l'altro negli Stati Uniti, sul ruolo della prostatectomia radicale nel paziente con metastasi ossee limitate, ciò non merita ulteriore commento…!!

Sentiremo poi qual è l'opinione dei colleghi sui deficit erettili in soggetti avanti con l'età che, a mio avviso, ancor oggi vedono il trattamento farmacologico come un rischio piuttosto che un ausilio, per chi è interessato, al miglioramento della qualità della vita.

Grande spazio ha trovato il termine multidisciplinare che spero abbia un riscontro nella pratica clinica quotidiana. Allo scopo di curare le neoplasie con la condivisione di opinione di vario specialisti, quest'anno prenderà avvio una iniziativa storica per l'AURO: con altre Società quali la SIURO e l'AIOM, ci siederemo attorno ad un tavolo anche con la SIU.

La patata bollente spetterà a me in qualità di Presidente , seppur all'epilogo del mandato, ma vi giuro metterò tutto il mio impegno allo scopo di fare in modo che, grazie all'accordo di vari specialisti, la appropriatezza ed il rispetto dovuto al paziente prevalgano su conflitti passati.

Sentiremo parlare di continenza dopo prostatectomia radicale nella speranza che il confronto tra chirurgia tradizionale e robotica venga da dati veri e non da numeri condizionati dal marketing.

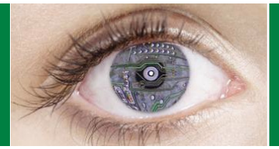
Sono certo sarà motivo di discussione la problematica, sempre più di attualità, delle piccole masse renali che, nonostante l'incremento vertiginoso di incidenza e terapia, non hanno visto ridursi in maniera altrettanto significativa la mortalità cancro specifica.

Da ultimo, mi auguro che la collaborazione con EAU consenta di fare il punto sull'attuale ruolo della adenolinfectomia in oncologia urologica in quanto mi sembra

che, ancor oggi, si proceda per convinzioni personali, troppo spesso dettate da tradizioni di scuola prima che da evidenze scientifiche.

Il Presidente
Pierpaolo Graziotti

Indice a colpo d'occhio
Index at a glance



per trovare gli **abstracts** si individuano le rispettive sessioni...come da programma...gli **abstracts** sono ordinati consecutivamente in ordine di presentazione.

Nota della Redazione

La responsabilità dei testi è esclusivamente degli Autori.
La redazione del presente elenco degli abstracts consiste nella pura impaginazione dei testi così come pervenuti.
Correzioni minime, ma indispensabili per la comprensione, sono state necessarie al fine di rendere leggibili grammaticamente i titoli. Nessun intervento è stato fatto sui testi se non di composizione grafica.

orari	domenica 24	lunedì 25
sala A		
08:00 - 09:30		Comunicazioni 3 pag 46 **MRI e biopsie** *L. Di Clemente, C. Introini, M. Prencipe*
15:30 - 17:00	Comunicazioni 1 pag 7 **Andrologia** *E. Caraceni, E. Pescatori, M. Tavolini*	Video 5 pag 80 **Laparascopia a 360°** *M. Amenta, M. Spagni*
sala B		
08:00 - 09:30		Video 4 pag 59 **Pene d'amore** *F. Colombo, M. Paradiso*
15:30 - 17:00	Video 2 pag 21 **Laparoscopia no limits** *P. Belmonte, P. Fedelini*	Comunicazioni 4 pag 86 **Lungo la trafila urinaria** *P. La Rosa, A. Polara*
sala C		
08:00 - 09:30		Discussione poster digitali 1 pag 62 **Tumori della vescica** *G. Artuso, M. Caponera, R. Hurle*
14:30 -15:30	Video 1 pag 4 **Laser ed eventuali** *C. Saltutti, I. Vavassori*	
15:30 - 17:00	Video 3 pag 25 **Buchi e sassi** *G. Napodano, M. Simone*	Video 6 pag 122 **Neoplasie del rene** *A. Samuelli, G. Zarrelli*
sala D		
08:00 - 09:30		Discussione poster digitali 2 pag 72 Prostata in tutte le salse *M. Ferriero, R. Giulianelli, M. Potenzoni*
14:30 -15:30	***Proiezione continua poster digitali***	***Proiezione continua poster digitali***
15:30 - 17:00	Comunicazioni 2 pag 29 **Urologia funzionale** *A. Ceresoli, M. Fiori, G. Palleschi*	Discussione poster digitali 3 pag 128 **Urology fusion** *A. Giacobbe, C. Meccariello, B. Vezzù*
17:00	***Proiezione continua poster digitali***	

Domenica 24 maggio

Sala C

14:30 -15:30

Video 1

Laser ed Eventuali

Moderatori:
Carlo Saltutti,
Ivano Vavassori

1. Mini-Invasive Treatment of Benign Prostatic Hyperplasia: An Optimized Transurethral Laser Enucleation of Prostate with an Innovative Double Wavelenght Thulium Laser (Thulep)

R. Migliari[1], A. Buffardi[1], H. Ghabin[1], D. Surleti[1], P. Gamba[1], A. Caputo[1]
[1] A.O. Ordine Mauriziano Ospedale "Umberto I", S.C. Urologia (Torino)

Transurethral removal of prostatic tissue is the treatment choice for symptomatic BPH with bladder outlet obstruction (BOO). Various laser devices have been introduced in clinical practice, showing good results. The aim of this video is to present a novel technique of complete transurethral removal of the transition zone (enucleation) with the support of a new Thulium laser device, which is able to combine and optimize cutting and coagulation at a different wavelenghts (Thulium 1940nm and Diode 1470 nm). We present distinct surgical steps in chronological order with the help of intraoperative pictures for transurethral complete removal of the transition zone of the prostate (ThuLEP). Thulium laser energy of 60 W at 1940nm were used for the incision at the verumontanum, anterior commissura and bladder neck, whereas laser energy of diode 30 W at a 1470 nm) was only used for coagulation of small vessel. The lobes themselves are liberated by blunt dissection and finally morcellated or resected with monopolar. Optimized ThuLEP represents an innovative option in patients with BPH. It is a size independent surgical endoscopic technique with a low complication rate.The use of a double wavelenght laser improves the coagulative effects of the laser.

2. Photoselective Vaporesection Of The Prostate With 180W Green Laser: Surgical Technique And Experience After 75 Procedures

A. Fandella[1], S. Guazzieri[1]
[1] Casa Di Cura Giovanni XXIII (Monastier Di Treviso)

Objective:
The objective of this report is to detail our approach and technique for GreenLight XPS drawing on department experience. This is a prospective study of 75 patients undergoing Green Laser vaporization of the prostate between November 2012 and February 2015. Their average age, prostate size, and International Prostate Symptom Score (IPSS) were 72.3±7.3 yr, 52.4±34.0ml, and 25.9±4.0, respectively.

Surgical Procedure:
The operative technique is detailed in the video.

Results And Limitations:
In all cases, Green Laser vaporization was successfully performed, with a mean operating time of 57 minutes (range 20-120 minutes). In most cases, we used just one fibre, the mean energy released being 170.000 Joules (range 80.000-270.000). The mean hospital stay was 36 hours.. All patients were catheter-free after 1 week. The mean urinary peak flow increased from the preoperative value of 8.5 mL/sec to 23.7 mL/sec . The mean IPSS decreased from 19.0 to 9.5 and 7.5 at 3 and 6 months. One major complications occurred intraoperatively Two patients were admitted for secondary hematuria and urinary infection, and 7 patients presented irritative low urinary tract symptoms.

Conclusions:
Green Laser 180 W PVP is a technique that is effective and safe for treatment of benign prostatic hyperplasia.

3. Enucleazione Prostatica Retrograda Con Resettore Bipolare E Morcellazione

A. Meneghini[1], A.. Haile Selassie[1], A. Crestani[1]
[1] Azienda ULSS 19 Adria, U.O.C. Urologia (Adria)

L'enucleazione prostatica retrograda con l'impiego del laser rappresenta una tecnica ampiamente utilizzata nel trattamento dell'ostruzione cervico-uretrale. La medesima tecnica può essere eseguita mediante dissezione meccanica associata all'impiego di un comune resettore bipolare. Dopo l'enucleazione il lobo prostatico, ancora peduncolato, può essere resecato in modo esangue. Tale tecnica tuttavia comporta un inevitabile allungamento del tempo operatorio. L'ausilio di un morcellatore tissutale consente una rapida e completa enucleazione e la rimozione del tessuto enucleato sospinto in vescica in modo rapido, sicuro ed efficace. Pur trattandosi di una esperienza preliminare l'enucleazione prostatica bipolare si è dimostrata una tecnica sicura, riproducibile e dalla contenuta curva di apprendimento. Il filmato riassume la nostra esperienza in una "assessment phase" di 31 casi eseguiti in sei mesi.

4. Trattamento Risolutivo Di Voluminosa Ginecomastia Bilaterale Da Ca Della Prostata

O. Varriale[1], A.. Maffucci[1]
[1] Ospedale Dei Colli Presidio V. Monaldi, U.O.C. Urologia (Napoli)

Paziente di anni 67,prostatectomia radicale retropubica per Ca di alto grado.Dopo 2 anni ripresa biochimica di malattia e terapia con Bicalutamide. Azzeramento PSA e comparsa di voluminosa ginecomastia bilaterale con tensione dolorosa. Tamoxifene e scomparsa del dolore. Persiste la voluminosa ginecomastia. Radioterapia conformazionale e sospensione definitiva della Bicalutamide. Persiste PSA azzerato. Paziente di aspetto giovanile con volontà di frequentare spiagge ove però è vittima dell'interesse altrui. Ciò gli impedisce di godersi le vacanze al mare. Richiese un trattamento che risolvesse definitivamente il suo problema. Gli fu proposto e lui accetto' una Mastectomia subtotale bilaterale. L' intervento è previsto tra le pratiche chirurgiche dell'urologo in one Surgery. E' stato eseguito in anestesia locale con sedazione. Un miscuglio di Anestetici, Cortisone, Adrenalina, Bicarbonato e Soluzione Fisiologica è inoculato con ago tra il derma mammario e la ghiandola mammaria e poi successivamente tra la fascia dei muscoli pettorali e la ghiandola mammaria in profondità. Lo scopo è ridurre al minimo il sanguinamento e favorire l'isolamento della ghiandola mammaria. Si lascia un po' di mammella sotto il capezzolo per evitare una retrazione antiestetica del capezzolo e la sutura cutanea è in vicryl rapid. Dopo due settimane era felice di godersi il suo Torace mascolino.

5. En Bloc Enucleation Of Primary Non Muscle-Invasive Bladder Cancer (Nimbc) With A New Optimized Thulium Laser

R. Migliari[1], A. Buffardi[1], H. Ghabin[1]
[1] A.O. Ordine Mauriziano Ospedale "Umberto I", S.C. Urologia (Torino)

Endoscopic en bloc tumour enucleation with laser is becoming a new modality treatment of NMIBC. Aim of this video is to show the effects and the surgical steps of a new optimized laser enucleation of NMIBC using a new Thulium:Yttrium-Aluminum-Garnet double wavelenght laser: the MultiPulse Tm+1470 provided by Jena Surgical. The video shows how the neoplasm can be easily removed en-bloc, apart of patients where is necessary to partially divide the specimen into 2 or more fragments for retrieval. Obturator nerve reflection is avoided during laser enucleation. Bladder neoplasms around uretereal orifice can be more precisely treated with Thulium laser. Bladder detrusor can be easily provided in all cases. Hemostasis is excellent due to the diode fiber. Optimized ThuLEBT is a simple method that seems to overcome the "incise and scatter" problem associated with TURBT. Two-micron continuous-double wave thulium laser presents optimal cutting and coagulative properties. Clear and complete tumor bases were easily conserved by laser resection, which may enable pathologists to distinguish the T stages of bladder cancer more easily.

6. En Bloc Thulium Laser Resection Of Bladder Tumors: 3-Yr Single Centre Experience

G. Simone[1], D. Collura[1], L. D'urso[1], A. Giacobbe[1], R. Rosso[1], E. Castelli[1], G.L. Muto[2], G. Muto[3]
[1] Ospedale San Giovanni Bosco (Torino)
[2] Università Campus Biomedico (Roma)
[3] Ospedale San Giovanni Bosco, Università Campus Biomedico (Torino, Roma)

Introduction & Objective:
To describe surgical tips of en bloc bladder tumor resection with thulium laser and to report perioperative and oncologic outcomes of a single-center series.
Materials and Methods:
Data about 146 patients who underwent this technique were collected. The video highlights surgical tips of this technique in 4 different clinical scenarios. Perioperative outcomes and 3-yr oncologic outcomes were reported.
Results:
Mean operative time was 26.6 minutes, mean hospital stay was 1.6 days. The overall complication rate was 5%. No grade 3 Clavien complication occurred. Obturator reflex was never observed. 3-yr recurrence free survival rate for Ta low grade tumors and papillary urothelial neoplasms of low malignant potential was 78.5%. The 3-yr recurrence free survival rate for T1 high grade tumors with a negative ReTURB was 80%.
Conclusions:
Preliminary results suggest that en bloc thulium laser resection of bladder tumors is a safe and oncologically effective technique. Thulium laser allows surgeon to perform resection without obturator reflex and to spare ureteral orifices, making tumors laterally located and those involving the ureteral orifice the best targets for this technique.

Domenica 24 maggio

Sala A

15:30 -17:00

Comunicazioni 1

Andrologia

Moderatori:
Edoardo Pescatori,
Enrico Caraceni,
M. Tavolini

Focus on:
Reali indicazioni al trattamento del varicocele
Edoardo Pescatori

1. Retrograde Embolization Of Varicocele: Our Experience

G. Salinitri[1], G. Fragapane[1], A. Spinazzola[2], P. Alongi[1], S. De Cenzo[1], N. Cionfoli[2], A. Baresi[1]
[1] Ospedale Maggiore, U.O. Urologia (Crema)
[2] Ospedale Maggiore, U.O. Radiologia (Crema)

Objective
As part of minimally invasive surgery of varicocele we wanted to evaluate the efficacy and morbidity of scleroembolizzazione retrograde.

Materials and Methods
From June 2009 to January 2014 were recruited 120 patients, aged 15 years and 40 years (median age 27.5 years) with various degrees of varicocele found all'ecocolordoppler scrotal and associated alteration, the semen analysis pre-operative, the fertility parameters (oligo-astheno-teratozoospermia) and underwent surgery mini invasive retrograde selective embolization of the left spermatic vein. 100/120 of these patients were subjected to selective embolization dellla spermatic vein with sclerosing solution and 20 patients with use of spirals. All patients were evaluated with Doppler ultrasound examination scrotal at 7 days to 1, 3, 6, 12 and 24 months and a semen analysis at 6 and 12 months.

Results
106/120 patients (88.3%) had no complications. 5 of 120 patients (4.1%) did not undergo the procedure for issues related to anatomy not complacent, 4/120 (3.3%) had a recurrence at 3 months and therefore started to traditional surgery, 2 patients (1.6%) developed un'orchiepididimite reactive substance sclerosing in the post-intervention. Of the 20 patients treated with spirals 10 (50%) had not benefited from the treatment controls 7 and 30 days. At a median follow-up of 12 months there has been a marked improvement in the parameters of fertility after semen analysis on 72% of patients treated with a fertility index of 30%.

Discussions
The varicocele may arise already in pre-adolescent age (reflected in the 2-2.5% of children between 7 and 10 years) but the era in which it normally occurs that of sexual maturation, between 11 and 16 years. The finding of
varicocele in this age group is different depending on the studies carried out (varies from an incidence of 13 to 28%) but is still similar to that adulthood. The retrograde embolitazion is a minimally invasive technique used in the treatment of varicocele. The advantages over traditional surgery are: More effective in terms of pain reduction in post operative
Hospitalization times short Lower rate of complications and recurrence compared to traditional surgery (4-5% vs. 25-30%).
Conclusion
The selective embolization of the spermatic vein is performed on an outpatient basis and in regional anesthesia. From our experience has shown that and is still reliable, effective and minimally invasive and with a very low complication rate. The length of stay is very short and the patient usually resumes its normal course of business the day after the procedure.
At a median follow-up of 12 months, we have seen a significant improvement in fertility rates and a significantly lower relapse rate compared to traditional surgical techniques. The use of sclerosing substances appears to be, at least in our clinical experience, much more effective than the use of endovascular coils.
References
Beneficial Effect of Microsurgical Varicocelectomy is Superior for Men With Bilateral Versus Unilateral Repair Jamie Libman,* Keith Jarvi, Kirk Lo and Armand Zini† Vol. 176, 2602-2605, December 2006 The Journal Of Urology

2. The Role Of Phlebografy In The Tauber Sclerotherapy: Is It Always Necessary?

M. Amenta[1], R. Soncin[1], G. Olivo[1], R.. Bertoloni[1], M. Beringi[1], G. Pecoraro[1]
[1] Ospedale di Isola della Scala (Isola della Scala)

Objective
Tauber anterograde sclerotherapy is a well established surgical procedure for the treatment of idiopathic varicocele (1-3). The procedure is simple, but a detailed knowledge of the angioarchitecture of the spermatic cord is recommended to avoid complications (4). The complications are scrotal haematoma, sterile epididymitis, testicular atrophy, partial abdominal wall necrosis (5). It was a case of ischemic necrosis of the sigmoid colon (6). The classic procedure begins with a plebography (4) of spermatic vein before injecting the sclerotic solution (7). We decide to examine the possibility of performing the procedure without using contrast plebography.

Materials and Methods
Between January 2004 and June 2013 we treated 300 patients with left varicocele. The mean age was 22.4 years.
The most frequent spermiographyc abnormalities, evaluated with WHO criteria, were oligoastenospermia: severe in 121 (40.2%) and moderate in 137 (45,6%); astenospermia: slight in 42 (14,1%). Teratospermia: moderate in 59 (19,5%) and low grade in 81 (29,3%). 13 patients (4.3%) showed low astenospermia associated with testicular pain and unresponsive to medical therapy. Clinical history data was collected for all patients, together with a physical examination, and an echo-color-doppler examination of the spermatic veins in the standing and supine position. All the patients were treated by modify Tauber antegrade sclerotherapy. Under local anesthesia a 2 cm vertical incision of the scrotum was made 2 cm below the root of the penis. After isolating the spermatic cord and opening the spermatic fascia, the largest vein of the spermatic plexus was identify, isolated and hang up between two thread. Then a 24 Gauge double-channel needle was inserted in the vein. To ensure the correct position of the needle inside the vein we inject saline and if the fluid escapes from the veins we do not inject the air or sclerosing solutions as describes for the Tauber technique, but we are looking for another venous access. Patients were follow-up after one week, then after one month after surgery. An andrologic evaluation including semen analysis was performed at 6 months including an echo-color-doppler examination of the spermatic vessels. The average follow-up is 11.87 months.
Results
Surgical time ranged from 15 to 25 minutes with a mean of 20 minutes. 7 immediate post-operative complications were observed (2,17%), both involving hematoma, which cleared up with conservative treatment. At one-week follow-up, we observed pain in 42 (14,1%) patients. Only 13 patients (4.34%) reporting taking NSAIDs. An inflammatory reaction was observed on the funicular portions in only 13 cases (4,34%). At one months follow-up we observed a complete regression of the reaction. Another examination was performed after other 3 months. In 29 cases (9.78%) we observed persistent of the reflux. Of the 271 patients without reflux the semen analysis returned to normal in 179 (66,3%) cases after 6 months and in 248 cases (82,6%) after 9 months. In 26 patients (8,7%) the semen analysis improved while in 29 cases (9,7%) it remained unchanged. Of the 13 patients with pain 7 reported no testicular pain while 6 reported no change.

Discussions
Varicoceles are the most common abnormality found in men with both primary and secondary
male factor infertility. Although the exact mechanism of varicocele effect on fertility is highly debated, in general, the data seem to demonstrate that varicoceles have a deleterious effect on spermatogenesis. Tauber anterograde sclerotherapy is a well established surgical procedure for the treatment of idiopathic varicocele (1-3). The procedure is simple, but a detailed knowledge of the angioarchitecture of the spermatic cord is recommended to avoid complications (4). The results obtained with the modified procedure were similar to those using the classical technique in terms of efficacy and side effects (5,8-10).
Conclusion
Based on available evidence in the literature, the results obtained with the modified procedure were similar to those using the classical technique in terms of efficacy and side effects (5,8-10). We observed a reduction in surgical time and costs, and above all we eliminated X-ray exposure. Considering the low persistence and complication rates in all patient categories (adolescents, adults, first diagnosis, and bilateral and recurrent disease) antegrade scrotal sclerotherapy (without X-ray exposure) can be proposed as a safe and efficacious first choice treatment for varicocele. A specific learning curve is required to achieve the best outcome, also in this type of surgery.

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varicocele sclerotherapy. Urologe A. 1997, Sep; 36(5): 44, 9-51

3. Severe Obstructive Sleep Apnoea Syndrome And Erectile Dysfunction: A Prospective Randomised Study To Compare Sildenafil Vs Nasal Continuous Positive Airway Pressure A.L..

Pastore[1], G. Palleschi[1], L. Silvestri[1], A. Leto[1], Y. Al Salhi[2], A. Gallo[3], G. Pagliuca[3], A. Carbone[1]

[1] Università "La Sapienza" di Roma, Facoltà di Farmacia e Medicina, Dipartimento di Scienze e Biotecnologie Medico-Chirurgiche, U.O.C. Urologia (Latina)

[2] Università "La Sapienza" di Roma, Facoltà di Farmacia e Medicina, Dipartimento di Scienze e Biotecnologie Medico-Chirurgiche, U.O.C. Urologia (Latina)

[3] Università "La Sapienza" di Roma, Facoltà di Farmacia e Medicina, Dipartimento di Scienze e Biotecnologie Medico-Chirurgiche, U.O.C. Otorinolaringoiatria (Terracina)

Objective

A high incidence of erectile dysfunction (ED) among patients with obstructive sleep apnea syndrome (OSAS) has been reported, with a strong correlation among OSAS, ED and quality of life (QOL), it has been estimated that 10 to 60% of patients with OSAS suffer from ED. In this prospective, randomized trial we have investigated 82 consecutive men with ED who had been referred to the outpatient clinic for sleep disorders and proved to suffer from severe OSAS (AHI>30 events / hour). Aim of this study was to evaluate and compare the efficacy of sildenafil versus CPAP lonely in men with ED and severe OSAS.

Materials and Methods

This prospective, randomized unsponsored clinical trial included 82 consecutive men with ED who had been referred to the outpatient clinic for sleep disorders and proved to suffer from OSAS. Inclusion criteria was a severe OSAS as defined per apnoea/hypopnoea index (AHI) more than 30 events per hour as evidenced by recent polysomnography (performed <6 months earlier). Exclusion criteria included: known ED treated with medication or intracavernous injections, blood hypertension (systolic blood pressure above 160mmHg; diastolic blood pressure above 100mmHg), use of nitrates, diabetes mellitus, vascular diseases (deep vein thrombosis, peripheral vascular disease, Raynaud's disease, vasculitis syndromes), mild and moderate OSAS (AHI<30 events per hour), peripheral neuropathic disease, prostate cancer, pelvic trauma history, renal transplantation, aortic aneurysm, spinal cord injury, endocrine disturbances, penile deformity current alcohol or drug abuse, and medications that could affect erection (eg, beta blockers, H2 blockers). All recruited patients were randomized in 2 main treatment groups: group 1 (41 men) was treated with sildenafil 100 mg (1 hour before sexual intercourse) without CPAP, and group 2 (41 men) was treated with only nasal CPAP during night time sleep. Both groups were evaluated with the same questionnaires (International Index of Erectile Function-EF domain; Sex Encounter Profile; Erectile Dysfunction Inventory Treatment Satisfaction) after 3-months treatment.

Results

Under sildenafil, 312/536 (58.2%) of attempted intercourses were successful compared to 156/512 (30.4%) under CPAP. The number of attempts reported by patients under sildenafil was slightly higher than patients under CPAP (mean: 13.0 vs. 12.4; p=0.1995), but with a significant higher successful report (mean: 7.6 and 3.8; p<0.0001). Moreover, the mean number of successful attempts per week was 2.9 in the sildenafil group, which was significantly higher than the 1.7 successful attempts per week in the CPAP group (p<0.0001).

The mean IIEF-EF domain scores were significantly increased in both groups compared to baseline (26.3 vs 15.8, p<0.0001 in sildenafil group; and 18.7 vs 15.4, p<0.0001 in CPAP group). When the mean IIEF-EF domain scores were compared a significantly higher score was reported in sildenafil treatment group than the CPAP group (p<0.0001).

Overall, 12 of 41 men (29%) were satisfied with CPAP treatment for ED, whereas 28 of 41 men (68%) were satisfied with sildenafil. Satisfaction with treatment was significantly higher among the patients under sildenafil than that in the CPAP group (p = 0.0015). The corresponding partners' confirmed these data satisfaction rates that were absolutely equal to those reported by the patients (29% with CPAP and 68% with sildenafil). Therapeutic satisfaction was clearly superior among the partners of sildenafil treated patients compared to the CPAP group (p = 0.0006). The analytical assessment of answers to EDITS given by patients and their partners revealed that partners gave a different evaluation of treatment satisfaction. However this difference was not statistically significant, the satisfaction scores reported by patients and partners with sildenafil were significantly higher to that achieved with CPAP.

Discussions

In this study, we investigated only patients with severe OSAS and ED. Since our purpose was to study only severe OSAS patients with related ED, a strict enrolment selection was performed. In order to collect only subjects with severe OSA as main cause of ED, patients with the most frequently ED related comorbidities (e.g. blood hypertension, diabetes, etc.) were excluded.

CPAP therapy was advised routinely in all these cases. Patel et al. reported with CPAP a significant improvement in objective and subjective measures of sleepiness in patients with OSAS with ED. Whether the improvement was due to the CPAP effectiveness of or because all patients had severe OSAS, it remains unclear. In the study by Perimenis et al. sildenafil increased CPAP effectiveness in patients with mild OSAS when compared with CPAP alone.

Our study is, to date, the only trial that has investigated the PDE5 inhibitors in patients with severe OSAS. This study shows that severe OSAS is strongly associated with ED. In our study, we reported a high overall response rate to sildenafil 100 mg treatment compared with previous studies in the literature. The results obtained in our study are correlated to the selection of enrolled patients, which provided strict exclusion criteria. The high response rate to sildenafil in fact is due to the exclusion of major diseases responsible for ED (blood hypertension, diabetes mellitus, peripheral vascular and neuropathic disease, prostate cancer, spinal cord injury, endocrine disturbances, current alcohol or drug abuse, and medications that could affect erectile function). The direct smooth muscle relaxation in the penile arteries and corpora cavernosa achieved by sildenafil may explain the higher effectiveness of this treatment compared to CPAP. The higher efficacy of sildenafil may thus explain the greater number of intercourse attempts, reflecting the patients strengthened self-confidence.

Even though overall satisfaction with treatment was significantly higher among the patients under sildenafil than that in the CPAP group, about one third (32%) of patients were not satisfied even with the more effective treatment. These data suggest that there is still no specific treatment for erectile dysfunction related to OSAS, and combination therapy (CPAP and sildenafil), as previously reported in the literature does not seem to achieve significantly higher satisfaction rates. We conclude a different therapeutic mode should be studied further.

Conclusion

Treatment of ED in OSAS is still controversial and varies according to its principal cause, but the cause of OSA related ED remains unclear. Consequently, without defining the cause of ED, many drugs such as sildenafil have been used for treatment. This study confirms that severe OSAS is strongly associated with ED. CPAP and sildenafil 100 mg are safe and effective therapies in OSA related ED patients. In the present study sildenafil proved to be more effective than CPAP as it resulted in a significantly higher rate of successful attempts for intercourse and higher IIEF-EF domain scores. Moreover, we reported a high overall response rate to sildenafil 100 mg treatment compared with previous studies in the literature, due to severe criteria of patient enrollment.

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4. Long Term Efficacy Of Low Intensity Linear Focused Shockwave Therapy For Vascular Erectile Dysfunction Patients: 20 Months Follow-Up

A. Casarico[1], P. Puppo[1]

[1] Casa di Cura Villa Montallegro (Genova)

Objective

Erectile dysfunction is a common medical disorder that primarily affects men older than 40 years of age [1]. Phosphodiesterase type 5 inhibitors (PDE5i) are considered as first-line therapy as they increase arterial blood flow leading to smooth muscle relaxation, vasodilatation and penile erection [2]. The limitation in the efficacy of PDE5 inhibitors is that a 'critical amount' of NO is necessary for these drugs to work. Therefore, in cases of impairment in NO synthesize or release or in cases of destruction of NO, PDE5 inhibitors cannot cure erectile dysfunction (ED) symptoms [3]. Lately, studies have started to evaluate the effect of low intensity shockwave (LISW) to treat ED on PDE5i responders and non-responders patients [4-8]. The current study evaluated how the therapy by a new device ('RENOVA', Initia Ltd, Israel) using low-intensity linear focused shockwave exerts effective and sustainable results at long term follow-up on patients who suffer from ED of vascular origin and experience full, partial or no response at all to PDE5 inhibitors.

Materials and Methods

This study was conducted from March to December 2013. Eligible patients were suffering from Vasculogenic ED for at least 6 months, and their International Index of Erectile Function score (IIEF-EF, [9]) was between 9 and 25 (while on PDE5i). Patients who had hormonal, neurological or psychological pathology or had undergone radical prostatectomy were excluded.

The treatment consisted of 4 weekly sessions. Shockwaves were delivered with a maximum energy of 0.09mJ/mm2; no anesthesia was required. At the end of the full treatment a total of 20000 SW was delivered (6400 shocks at each crura, 3600 shocks at each corpus) Erectile function was evaluated by means of IIEF-EF, questions 2-3 of the Sexual Encounter Profile (SEP), questions 1-2 of the Global Assessment Questions (GAQ) and the Erection Hardness Score (EHS), at baseline and 1, 3 and 6 months posttreatment. Success was defined as positive answer to both SEP and both GAQ questions, EHS of 3 or higher and an increase of IIEF-EF score from baseline to 6 months follow up according to the severity of the symptoms [10]. Out of 25 patients enrolled to this study, 24 finished the full treatment series. The mean age was 62.58 ± 8.32 (45-74) years and the mean duration of ED was 4.84 ± 4.46 (1-20) years. 52% were smokers, 26% had diabetes, 58% had high cholesterol levels, 37% had a cardiovascular disease and 47% had hypertension. 75% of the patients had a positive response to PDE5 inhibitors. At the end of the treatment and during the follow-up period patients were using PDE5 inhibitors as needed. 14 patients out of 19 patients who had a successfull result in all evaluation parameters at 6 months follow-up were evaluable for long-term follow up (15-21 months; mean 19.8 months). They completed again all the questionnaires.

Results

At 6 months follow-up the overall percentage of patients who achieved positive outcomes at all 4 evaluation questionnaires was 79%. 33% of the PDE5i non-responders (2/6) and 94% of the responders (17/18) achieved positive outcomes at all 4 evaluation questionnaires. 44,4% of the responders stopped using PDE5 inhibitors at 6 month follow-up. None of the patients have reported on pain during or after treatment. No adverse events were reported. 11/14 patients (78.5%) who had a successfull result at 6 months FU, and were evaluable for long-term FU (15-21 months; mean 19.8 months), maintained the advantage gained.2 patients, PDE5i non responders, continued to respond to PDE5i. Their IIEF at long term FU was respectively 19 (+1) and 23 (-2). 9 patients, PDE5i responders, lost 5 points globally at IIEF-6; SEP and GAQ were unchanged; EHS was reduced from 4 to 3 in only 1 patient and was maintained at 4 in 4 patients. 5 out of these 9 patients had successful intercourses without PDEi or used them occasionally. 3/14 patients (21.4%) did not maintain the advantage gained at the long term FU. IIEF (while on PDE5i), was 20/24/21, 15 points lower (-9/-2/-4) than at 6 months FU; SEP was unchanged (2); EHS was 1 point lower (from 4 to 3) in 1 patient; GAQ dropped from 2 to 0 in all 3 patients.

Discussions

This pilot study was designed for assessing the long term efficacy of a novel device for the treatment of erectile dysfunction, based on an original technology that enables the delivery of low-intensity shockwaves onto a long focal area. The subjects in this study included also patients with multiple co-morbidities, different degrees of response to PDE5 inhibitors and wide range of ED severities. The results of this study demonstrate a possible alternative treatment for some of the patients who did not respond to first-line oral pharmacotherapy and thanks to this treatment may avoid turning to other therapy options which are less convenient to use. In parallel, these data imply on a potential mean to eliminate the need for PDE5 inhibitors which may significantly improve patients' quality of life. 6 months FU showed overall success in 79% of the patients. Success was maintained by 78.5% of these at longer FU (19,8 months mean). 55% of PDE5i responders (at baseline evaluation) continued to have successful intercourses without use of PDEi or using them occasionally.

Conclusion

A growing number of men develops vascular erectile dysfunction because of multiple comorbidities such as diabetes, hypertension, heart disease, dyslipidemia or smoke. PDE-5 inhibitors, alprostadil injections, vacuum constriction devices and surgical treatment are symptomatic therapies and do not help patients to achieve spontaneous erection. Moreover medications are contraindicated in some conditions and may have side effects. LISWT, is a promising, minimally invasive therapy without side-effects that induce the release of endothelial nitric oxide synthase, vascular endothelial growth factors and proliferating cell nuclear antigen and thus enhance neovascularization of the penis. The long-term follow up shows that the vast majority of patients who achieved a positive result from treatment with 20000 low intensity linear shock waves, delivered in 4 weekly sessions, continues to maintain the advantage gained after 19,8 months. The successful effect of treatment wanes gradually only in 21,4% of the patients. There is a need for further research to determine if modifications in the treatment protocol (number and intensity) of low-intensity linear focused shockwave could make the positive effect last longer and if an additional treatment could be useful for patients who did not have or lost a successfull result from the treatment.

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5. Predictive Factors For Return Of Erectile Function In Radical Prostatectomy: Postoperative Haemodynamic Profiles And Their Correlation With The Recovery Of Erectile Function

M.. Carrino[1], F. Chiancone[1], L. Pucci[1], G. Battaglia[1], M. Fedelini[1], R. Giannella[1], P. Fedelini[1]
[1] A.O.R.N. A.Cardarelli (Napoli)

Objective
Radical prostatectomy is associated with a loss of sexual potency in the majority of cases, due to injury to the autonomic cavernous nerves. Despite the advent of nerve sparing radical prostatectomy (the operation of choice in potent and sexual active men with organ confined disease), some men suffer with erectile dysfunction. There are several recognized factors correlated with the post-operative incidence of erectile difficulties. Predicitive factors are classically divided in pre-operative (in particular age, baseline I.I.E.F., and status of comorbid conditions), intra-operative (like surgical techniques, surgical volume and surgical skill) and post-operative (in particular pathological stage, response to PDE5 inhibitors and response to intracavernous injections)1-2. We evaluate the role of post-operative penile's haemodynamic at sixth month in fourty-eight patients with a normal pre-operative erectile function. Doppler ultrasonography is an effective, reliable and non-invasive and cheap mean of evaluating penile arterial and venous function.

Materials and Methods
From June 2013 to December 2013, 48 patients with prostate cancer underwent bilateral nerve-sparing radical prostatectomy at our hospital by the same surgeon. The average age of these patients was 59–68 years.
They had not any important comorbidities (hypertension, hypercholesterolemia, vascular disease and diabetes). 30 of 48 patients underwent laparoscopic radical prostatectomy (LRP) and 18 of 48 patients underwent open retropubic radical prostatectomy. Each patient had a normal erectile function before surgery (I.I.E.F. score between 26 to 30 and SHIM score between 22 to 25). None patient had rehabilitative therapy with PDE5 inhibitors, vacuum devices or intracavernous injections after radical prostatectomy. After six month all patients underwent a Doppler ultrasonography in order to evaluate penile's post-operative haemodynamic. At 12th month we surveyed these patients using the same self-administered questionnaire (I.I.E.F. and SHIM) during an andrological consultation.

Results
We found a normal vascular status, arterial insufficiency and venous leakage in 52% (25 of 48) , 31% (15 of 48) and 17% (8 of 48) of the men, respectively. Recovery of sexual potency, defined as the ability to penetrate and complete intercourse, was found in 90% (37 of 48) of men who underwent radical prostatectomy (20 LRP and 17 RRP). In this patients, I.I.E.F. score at 12th month was between 23 and 27, and SHIM score between 21 to 23. 65% (24 of 37) of men who had a recovery of sexual potency had a normal penile's haemodynamic, 24% (9 of 37) had an arterial insufficiency (peak systolic velocity < 35 cm/sec) and 11% (4 of 37) a veno-occlusive mechanism deficit (resistence index <0,75) . None of patients that suffered with both arterial insufficiency and veno-occlusive mechanism deficit, had a recovery of sexual potency 12 months post-operatively.

Discussions
Post-operative penile's haemodynamic at sixth month relates with erectile function recovery. Even if we have not studied patients who underwent rehabilitative therapy with PDE5 inhibitors, vacuum devices or intracavernous injections after radical prostatectomy, these therapies could help patients to improve their penile's haemodynamic. Veno-occlusive mechanism disfunction is a clear negative prognostic factor for recovery of sexual potency. In fact around fifty percent of patients with veno-occlusive mechanism disfunction did not recovery a good sexual function. Significant levels of apoptosis in smooth muscle cells and an increase in extracellular protein, as postulated in corporeal fibrosis, revealed a mechanism for veno-occlusive dysfunction observed after radical prostatectomy.

Conclusion
Our analysis confirms that doppler ultrasonography is an important mean of evaluating post-operative penile vascularization and can be useful to understand the probability of recovery of sexual potency in patient who underwent a nerve-sparing radical prostatectomy (both laparoscopic, robotic and open retropubic radical prostatectomy). Colour Doppler ultrasound appears to be the most reliable, non-invasive diagnostic test for erectile dysfunction after radical prostatectomy also in patients who do not respond to pharmacotherapy. More prospective studies on vascular involvement are required for full understanding of its role in post-radical prostatectomy sexual dysfunction, including an analysis of the vascular status before the procedure.

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6. Platelet Rich Plasma(Prp) As A Therapy In Induratio Penis

M. Moretti[1], P. Pittaluga[1], S. Scotto[1], M. Chiarla[1], W. Bozzo[2]
[1] Ospedale Villa Scassi ASL 3 Liguria (Genova)
[2] Ospedale di Sanremo ASL 1 Liguria (Sanremo)

Objective
Evaluation of safety and efficacy of PRP, containing growth factors and cytokines, in naive patients affected by Induratio Penis (IP)

Materials and Methods
25 males, age 44-80, with IP diagnosed by examination, ultrasound, pictures and symptom score (pain, curvature) were scheduled to receive intra- and periplaque injection of autologue blood enriched with platelets. Symptoms ranged one to 16 months: 20 had penis recurvatum ranging 15-30 degree, 5 only plaque with pain. After anticoagulation plasma is activated with calcium chloride wich induces release of growth factors and cytokines. Men were treated every twenty days, as outpatients procedure on local anesthesia, with evaluation of symptom, plaque size and tenderness, relief of curvature. Injection were performed with a 22 gauge needle with purpose to break the plaque. Counselling was given about stretching of erected penis. The trial includes six injection and re-evaluation after one month at the end of the set of injections.

Results
15 patients has complete satisfaction: reduced plaque size, tenderness and pain with erection (60%). 5 patients had improvements after only 3 treatments (20%) with regard of pain, plaque tenderness and recurvatum. 5 men reported only improvement in pain and plaque size and tenderness (20%) 5 patients reported no improvement (20%), three of them accepted plaque surgery.
Only one patient experienced transient swelling of inguinal nodes; every patients reported minimal pain during injection and oedema in the site of puncture (a few hours). No fever or general symptoms. We treated about three patients a day owing to the time blood unit needs to treat plasma: activation with calcium chloride and injection needs only 3 – 5 minutes.

Discussions

Clinical use of PRP ranges from muscle pain and bone repair, scar treatment and hair growth. Owing to rich content of growth factors and cytokines plastic surgeons widely use in scars and connective tissue diseases. Cochrane review from 2009 to 2014 founded only a few large trials about hair treatment and scars with variable results on pain and scars tenderness. IP can be actually considered a connective disease of albuginea penis with variable evolution in each patient. We adopted this rationale and treated naive patient with good results, even if in a little sample; the better result are observed in younger men and early treatment. Plaque size has no importance if soft, while recurvatum over 20-25 degrees is a negative factor, Older men with hard plaques went worse.

Conclusion

Urologic indications to PRP treatment are currently restricted to foreskin lichen sclerosus or chronic balanopostitis resulting in scar: this illness always shows good response cause growth factors and cytokines can change old connective tissue in a younger one. PRP procedure in IP can be used with the same purpose, is safe and promising; in our series, with follow-up ranging 2 – 9 months, no complications occurred, patients are satisfied and the procedure well-accepted. IP is a dynamic disease liable to evolution over time and PRP injections can be safely repeated in case of new plaques. Lipofilling plus PRP is actually under investigation in non- responders as intra- and post-surgery treatment.

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7. Stuttering Priapism In Patients With Sickle Cell Anemia: Efficacy And Safety Of A Pharmacologic Prevention With Sildenafil

M.. Carrino[1], L. Pucci[1], G. Battaglia[1], R. Giannella[1], F. Chiancone[1], P. Fedelini[1]

[1] A.O.R.N. A. Cardarelli (Napoli)

Objective

Stuttering priapism is a recurrent form of ischemic priapism in which unwanted painful erections occur repeatedly with intervening periods of detumescence1. This historical term identifies a patient whose pattern of recurrent ischemic priapism encourages the clinician to seek options for prevention of future episodes. The aim of our study is to evaluate the use of a long-term, continuos phosphodiesterase type 5 (PDE5) inhibitor therapeutic regimen in controlling recurrent ischemic priapism. The main outcome measure was reduction in frequency or duration of priapism episodes.

Materials and Methods

From January 2011 to January 2013, 15 patients with sickle cell disease-associated "stuttering" priapism were enrolled in our study (11 patients were followed by the Department of Hematology for a sickle cell anemia and 4 patients reached our emergency department). The average age was 26 years (age 19-37 years). For each patient, standard history and physical examination were performed. Laboratory testing was also conducted to screen for psychoactive drugs and urine toxicology to evaluate for the involvement of legal or illegal drugs know to precipitate priapism. All the patients had undergone cavernous blood gas testing from penile aspirates, to determine the classification of the presentation (ischemic or nonischemic). They were counseled and consented to the "off-label" use of PDE5 inhibitor sildenafil citrate2. We asked for drugs to our hospital pharmacy. The duration of clinical follow-up extended through 1 year.

Results

We confirmed that all patients had a sickle cell disease-associated priapism. Patients received sildenafil citrate at a 50-mg daily at the same hour in the morning. The treatment was successful in eleven patients, with an important decrease of priapism episodes after about 2 weeks of starting treatment and no patients reached our emergency department. All patient had no more priapism episodes after long-term therapy (from two to seven month with an average of three months of starting treatment). Each patient developed some priapism episodes after discontinuing the use of sildenafil citrate, believing that their priapism disorders had been resolved. Now all patients continue their PDE5 inhibitor therapy. Two patients had no reduction of frequency and duration of priapism episodes. One of these last two patients underwent a Winter's shunt procedure to resolve one priapism episode. Two patients interrupted therapy because of chest pain but therapy did not cause any serious adverse effects. Erectile function improved in nine patients and was unchanged in four patients.

Discussions

In this report we have evaluated a new treatment option for recurrent ischemic priapism. Recurrent priapism is a manifestation of defective PDE5 regulatory function in the penis, resulting from altered endothelial nitric oxide/cGMP signaling in this organ3. Sickle cell anemia patients are known to have chronically lower levels of NO than non sickle cell anemia patients and the cyclic nucleotide is produced in low steady-state amounts. This situation thereby down regulates the set point of PDE5 function (secondary to altered cGMP-dependent feedback control mechanism). In this context, when nitric oxide in neuronally dischargerd in sexual stimulation or during sleep-related erectile activity, cGMP production surges in a manner that leads to excessive erectile tissue relaxation because of basally insufficient functional PDE5 to degrade the cyclic nucleotide. The use of a PDE5 inhibitor in a long term, causes a heightened, basal amount of cGMP in the penis, which then progressively reestablishes normal PDE5 expression and activity. We suggest that patients use sildenafil citrate in the morning time after awakening under conditions of complete penile flaccidity while restricting sexual stimulation until only many hours later, in order to metabolize medication without risk of a priapism episode when unrestricted sexual activity or nighttime sleep would occur.

Conclusion

Our finding supports the feasibility of using PDE5 inhibitor sildenafil citrate in a clinical management program for patients with ischemic priapism in order to avoid the development of major complications from priapism recurrences. The use of this therapy is also supported by scientific principles. Moreover our patients preserved their sexual function and this therapy improved their quality of life. The only limitation of this therapy is its costs. Further investigations in the form of controlled clinical trials involved a bigger number of patient are necessary to confirm the utility of this treatment and the safeness also concerning an unclear increased risk of vasoocclusive pain crisis related to sildenafil citrate4.

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8. Heterotopic Placement Of Prosthesis Reservoir In Penile Prosthetic Surgery: Exception Or Rule M.

Carrino[1], L. Pucci[1], F. Chiancone[1], R. Riccio[1], C. Meccariello[1], P. Fedelini[1]

[1] A.O.R.N. A.Cardarelli (Napoli)

Objective

Traditional placement of tri-component penile prosthesis reservoirs into the space of Retzius may be difficult and dangerous in patient who have had previous pelvic surgery in particular kidney transplantation, inguinal hernia repair with alloplastic material, colectomy with ileostomy or colostomy, radical cistectomy with ortotopic bladder and transperitoneal robotic or laparoscopic radical prostatectomy1. To avoid the retropubic space in high-risk patients various maneuvers have been described for placing prosthesis reservoir in a location superficial to the transversalis fascia, including the infrapubic approach2. We show our preliminary experience in heterotopic implant of tri-component penile prosthesis reservoirs using a transscrotal approach.

Materials and Methods

From May 2012 to July 2014, sixty patient underwent penile prosthesis implantation with an AMS 700 3-piece inflatable penile prosthesis with a Conceal reservoir. Of these, twenty patient underwent heterotopic implant of reservoir in a submuscular location by bluntly tunneling through the external inguinal ring into a potential space between the transversalis fascia and the rectus abdominis muscle3. We used a thoracic surgery clamp. Average patient age was 65 years with an average BMI of 27.5 . The most common primary etiology of ED in the first 20 patients with sub-muscular Conceals was radical prostatectomy (45%). At 6th month all patient were given a standardized questionnaire (Morei questionnaire) during an andrological consultation. The surgeon also indicated on the questionnaire if he could palpate the reservoir at maximum volume. We use independent sample t-test and statistical significance was set at $P<0.05$.

Results

Submuscular implantation was possible in all patients without important complications and without necessity of an abdominal counterincision or perforation into the space of Retzius. Mean surgery duration was superimposable: 65 minutes ($\sigma=13$) for Retzius implantation and 70 minutes ($\sigma=13$) for submuscular implantation ($p=0,09$). One patient with Retzius implantation and one patients with submuscular implantation had scrotal hematoma. At six month, 90% of the cases (18/20) had no palpable reservoir and no disconfort . One patient had palpable reservoir (too low implantation) but he refused re-implantation. One patient underwent reservoir re-implantation because of important abdominal swelling due to a surgical mistake (subcutaneous implantation). BMI was not associated with reservoir palpability (BMI mean 27.2 ($\sigma=0.70$) when palpable vs. 28.3 ($\sigma=1.75$) when not palpable, $P=0,40$).

Discussions

We believe this technique represents a significant advance in prosthetic urology using a single incision transscrotal approach, in particular when traditional placement of reservoirs into the space is difficult and dangerous. We have found this technique to be simple and easy to teach and learn. Our study limitations include small number of patients sampled, short overall follow-up and use of a nonvalidated questionnaire. Nevertheless, this report represents a noteworthy initial experience at a high-volume prosthetic center. Although traditional placement of reservoir into the space of Retzius is widely utilized and have been safely employed for ten of thousand of patients, potential complications are described, including bladder perforation or erosion4 and vascular damages1-5. Our preliminary experience provides important clinical evidence that strongly supports the safety and continued expansion of the high submuscular alternative placement strategy, especially in high-risk patients. Sub-muscular placement avoids potential injury to bladder, bowel and blood vessels, especially in patients with previous pelvic surgery.

Conclusion

High submuscular placement of penile prosthesis reservoir using a single incision transscrotal approach, is a safe and reliable technique that avoids a laborious deep retropubic dissection in patient who have had previous pelvic surgery, in particular kidney transplantation, inguinal hernia repair with alloplastic material, colectomy with ileostomy or colostomy, radical cistectomy with ortotopic bladder and transperitoneal robotic or laparoscopic radical prostatectomy. Sub-muscular placement avoids severe intra-operative complications also in patients who have not had previous pelvic surgery. Our future target will be to increase our number of patients sampled. In the future, will this technique replace traditional technique in all patients?

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9. Targeting The Limited Access To Penile Prostheses In Italy: The Italian Registry For Penile Implants And The Divulgative Institutional Website Www.Androprotesi.It

E.. Pescatori[1], G. Franco[2], E. Caraceni[3], F. Colombo[4], F. Dehò[5]

[1] Hesperia Hospital (Modena)

[2] Policlinico Umberto I (Roma)

[3] Area Vasta 3 (Civitanova Marche)

[4] Policlinico S.Orsola-Malpighi (Bologna)

[5] Istituto San Raffaele (Milano)

Objective

In Italy presently patients with severe ED have limited access to the penile prosthesis option. This appears to be the result of different factors: Health Authorities do not have reliable figures on penile implantology; lay public is not properly (if at all) informed of the availability of the "prosthesis option"; National Health Care System Surgeons have few units/year available, while in private practice there is an issue of high device pricing; device Companies are not allowed direct consumer advertising.

The need of a prospective Registry on penile implants has been advocated (1).

The Italian Society of Andrology (S.I.A.) has devised a strategy to address the issue of limited use of the penile prosthesis option by means of the creation of both: a prospective Italian Registry for penile implants, and a divulgative Institutional website: www.androprotesi.it.

Materials and Methods

The Italian Registry for penile implants, named "INSIST-ED REGISTRY" (Italian Nationwide Systematic Inventarisation of Surgical Treatment for ED) is a prospective Registry of penile prostheses (all brands, all models), available to all implanting Surgeons operating in Italy, regardless of specific societary affiliations. Surgeons accepting to take part to the Registry agree to provide all data required by the fields of the database of the Registry (patient, device, surgical procedure, outcomes, follow-up data) for both first and revision surgeries, clear of any patient personal data. The purpose of the Registry is to provide solid data on the dimension of implantology in Italy and to ascertain the impact of penile implants on recipients quality of life at 1 year f.u. by means of the recently developed questionnaire QOLSPP (2). The divulgative Institutional website www.androprotesi.it is a Institutional website devoted to the lay public, where only the implanting Surgeons that adhere to the Registry will be present. The purpose of this website is chiefly to foster access of ED patients to penile prosthesis treatment, through a Institutional

(S.I.A.) website that would promote the prosthesis option for patients that qualify for it. This website provides the lay public with information that both: have the credibility given by the umbrella of a Scientific Society (all the materials present in the website must in fact be approved by an ad-hoc S.I.A. scientific committee, the Authors), and could not be otherwise advertised by Companies in Italy. Of note, only those Surgeons taking part to the Registry will be entitled to be present in the Institutional website.

Results

The Registry took officially off by December 2014. At the end of February we have 21 implanting Surgeons that decided to take part to the Registry, and are continuously adding cases to the Registry. The major device Companies for penile implants decided to support the project through pursuing the adhesion to the Registry of device implanters, and providing feedbacks of implanting activities to the Registry monitor. So far the overall project has been well accepted by the surgical community devoted to penile implantology, and by most of the Companies in the field.

Our inclusive strategy appears promising in that most of Italian implanting Surgeons should join the Registry.

Discussions

Analysis of Registry data might produce meaningful information at political, social, scientific and lay public levels; in particular such data might prove instrumental in negotiations with Health Authorities, aimed to get an appropriate reimbursement for this surgery. Data generated by the Registry could possibly promote the development of Centers of Excellence (3) for penile prosthesis surgery. The website www.androprotesi.it, besides promoting the prosthesis option for patients that qualify for it, should also motivate penile prosthesis implanting Surgeons to adhere to the Registry, as only those Surgeons taking part to the Registry will be entitled to be present in the Institutional website (to write contributions, to provide contact data and link to personal website, etc).

Conclusion

The "INSIST-ED Registry" represents the first experience of this kind at both national and international levels. The Registry is producing a positive feedback by both Implanters and device Companies. We expect that analysis of Registry data will produce robust data on both: the dimension of the penile implantology in Italy, and the impact of penile implants on the quality of life of the recipients. We concomitantly pursue to foster access of ED patients to penile implant treatment through our ad hoc Institutional website that is informing in a scientific and unbiased fashion the lay public on the penile prosthesis option.

References

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Domenica 24 maggio

Sala B

15:30 -17:00

Video 2

Laparoscopia no limits

Moderatori:
Pietro Belmonte,
Paolo Fedelini

1. Off-Clamp Robot-Assisted Partial Nephrectomy For High Nephrometry Score Renal Tumor

R. Papalia[1], G. Simone[2], M.. Ferriero[3], R. Mastroianni[3], S. Guaglianone[3], G. Muto[4], M.. Gallucci[3]
[1] Università Campus Biomedico, Istituto Nazionale Tumori "Regina Elena" (Roma)
[2] Istituto Nazionale Tumori "Regina Elena", Ospedale San Giovanni Bosco (Roma, Torino)
[3] Istituto Nazionale Tumori "Regina Elena" (Roma)
[4] Università Campus Biomedico (Roma)

Introduction:

Zero ischemia robotic partial nephrectomy is considered a challenging procedure. The video shows the feasibility of zeroischemia robot-assisted PN in high nephrometry score renal masses.

Methods:

A 40 years old woman was admitted to our department for a 6 cm right renal tumor predominantly endophytic. Padua Nephrometry score was 12. Preoperative sCreatinine was 0.87, preoperative eGFR was 77. A transperitoneal approach was used. The right kidney was isolated and flipped to allow circumferential exposure of the tumor. A cuff of fatty tissue was preserved to facilitate exposure of the mass. Renal parenchyma was incised and a dissection plane between healthy renal parenchyma and the tumor was found. During dissection specific vascular branches supplying the tumor were identified and treated with electrocautery.A point specific hemostasis was performed and defined areas of bleeding were identified and sutured.

Results:

Operative time was 120 minutes. Estimated blood loss was 300 cc. No intraoperative and postoperative transfusions were necessary. The patient was discharged 3 days after surgery. sCreatinine and eGFR at discharge were 1mg/dl and 67ml/min, respectively.

Conclusions:
Off-clamp PN in high nephrometry score renal masses is feasible at tertiary referral centres. Further studies are necessary to evaluate the easy reproducibility of this procedure.

2. Robotic Surgery For Inferior Vena Cava Thrombectomy

R. Papalia[1], G. Simone[2], M. Ferriero[3], R. Mastroianni[3], S. Guaglianone[3], G. Muto[4], M. Gallucci[3]
[1] Università Campus Biomedico, Istituto Nazionale Tumori "Regina Elena" (Roma)
[2] Istituto Nazionale Tumori "Regina Elena", Ospedale San Giovanni Bosco (Roma, Torino)
[3] Istituto Nazionale Tumori "Regina Elena" (Roma)
[4] Università Campus Biomedico (Roma)

Introduction And Objectives:
Robotic surgery as been applied to increasingly complex urologic procedures. Surgery of renal tumors involving the inferior vena cava (IVC) was usually performed by an open approach. At selected institutions, the advantages of robotic surgery for IVC thrombectomy is under investigation. We present here a case of robotic IVC thrombectomy.

Methods:
The video shows the robotic approach of IVC thrombectomy in a 82 years old man with right kidney cancer extended to the vena cava.

Results:
Thrombectomy time was 160 min, IVC clamp time was 55 min and nephrectomy time was 110 min. Thrombus Size was 3 cm. Estimated blood loss was 800 cc. No transfusions were necessary. POD1 Haemoglobin was 12.7 and sCreatinine 1.88. Patient was discharged 3 days after surgery.

Conclusions:
At selected institutions robotic surgery for level I and II caval thrombi is feasible. With experience and standardized surgical techinique, the procedure can be reproduced in selected institutions and properly selected cases. Further multy-institutional experiences are necessary to validate this relatively new challenging procedure.

3. Reimpianto Ureterale Destro Robotico Extravescicale Con Tecnica Antireflusso

A.. Serao[1], P. Vota[1], F. Cortese[1], D. Tiranti[1], P. Audino[1], M. Ferraro[1]
[1] Azienda Ospedaliera SS Antonio e Biagio (Alessandria)

Nel video viene mostrato un reimpianto ureterale destro robotico con tecnica antireflusso. La paziente di 40 anni accusava da circa un anno lombalgia destra e occasionali coliche renali con infezioni urinarie ricorrenti. In anamnesi non erano evidenti significativi elementi etiologici (parto cesareo senza complicanze).A un' ecografia addome e successivamente a una Tac addome si metteva in evidenza un' idronefrosi destra con assottigliamento dell'uretere destro prevescicale, con sospetta briglia aderenziale, dilatazione ureterale a monte e assenza di reflussi vescico-ureterali e di litiasi.Alla scintigrafia renale il rene destro evidenziava una funzionalità pari al 49 % con lieve ritardo della fase escretoria. Si decise pertanto un posizionamento di una protesi endoureterale doppio J . Essendo stata infruttuosa la manovra per via endoscopica (per stenosi serrata terminale dell'uretere evidente alla pielografia ascendente), il doppio J fu introdotto per via pielostomica.Fu programmato pertanto un reimpianto ureterale robotico . L'intervento condotto per via intraperitoneale ,con approccio extravescicale e tecnica antireflusso si è svolto senza complicanze.La paziente non accusa più sintomatologia algica e-o infettiva. Alla tac addome di controllo dopo tre mesi non è stata più evidenziata idroureteronefrosi destra e alla cistoscopia il neomeato ha aspetto regolare.

4. Trattamento Combinato Endo-Laparoscopico Dell'Ureterocele

G. Zarrelli[1], M. Iannucci[1], F. Fontana[1], G. Cipollone[1], G. Mastroprimiano[1], M. Sala[1], L. Apice[1], D. Paolinelli[1], F. Sereno[1]
[1] Ospedale Sant'Andrea (Vercelli)

L'ureterocele rappresenta una rara malformazione a carico dell'apparato urinario in cui si osserva un estroflessione cistica dell'uretere intramurale con presenza di meato puntiforme. Frequente conseguenza dei trattamenti di decapitazione endoscopica dell'ureterocele è rappresentata dal reflusso vescico-ureterale. Proponiamo un approccio combinato endoscopico e laparoscopico: si procede, per via trans-uretrale, a posizionamento di stent ureterale doppio J e decapitazione endoscopica del tetto dell'ureterocele; con accesso laparoscopico extraperitoneale, si esegue una cistotomia mediana e una sutura di accostamento dei margini di resezione dell'ureterocele sulla guida dello stent ureterale, allo scopo di creare un "neomeato". Alla rimozione dello stent ureterale, dopo circa 30 giorni, evidenza di neo-meato pervio e assenza di reflusso alla cistografia. Tale procedura, utilizzata in 2 casi, ha permesso con un approccio mini-invasivo, la risoluzione dell'ureterocele in assenza di reflusso senza la necessità di una ureterocistoneostomia.

5. Pieloplastica Laparoscopica In Rene Ectopico Pelvico

M. Fedelini[1], R. Riccio[1], C. Meccariello[1], F. Chiancone[1], G. Battaglia[1], P. Fedelini[1]
[1] AORN A. Cardarelli, U.O.S.C. Urologia (Napoli)

L'incidenza del rene pelvico varia approssimativamente da 1 : 2200 a 1 : 3000 nati. L'ostruzione del giunto pielo-ureterale nel rene ectopico pelvico si verifica in percentuali variabili dal 22% al 37%. L'endopielotomia è un'opzione terapeutica ad alto rischio e scarsi risultati. L'approccio laparoscopico permette un'ottima esposizione e tempi operatori poco diversi dalla pieloplastica effettuata in reni in sede ortotopica.
Gli AA nel video mostrano la tecnica per il trattamento della patologia del giunto pielo-ureterale in rene pelvico a sinistra.
Preliminarmente viene posizionato un catetere ureterale aperto in punta al di sotto della giunzione pielo-ureterale. In decubito laterale destro viene realizzato un miniaccesso open sovraomelicale sn leggermente in alto e a sinistra dell'ombelico. Vengono posizionati altri due trocar (da 11 a metà della linea ombelico-pubica e da 5 a metà della linea ombelico-spina iliaca anterior superiore). La pelvi dilatata è ben evidente subito esposta nel piccolo bacino, ma è ricoperta dal meso del sigma. Derotato il colon sinistro vegono esposte la pelvi renale dilatata e l'uretere. La resezione del giunto e l'anastomosi pielo-ureterale vengono realizzate con tecnica tipica (due semicontinue in vycril 5/0 su catetere preposizionato) anche se con maggiore difficoltà per la posizione più scomoda dell'area di lavoro.

6. Escissione Laparoscopica Di Ganglioneuroma Retroperitoneale Recidivo

M. Fedelini[1], L. Pucci[1], C. Meccariello[1], F. Monaco[1], D. Mattace Raso[1], P. Fedelini[1]
[1] AORN A. Cardarelli, U.O.S.C. Urologia (Napoli)

Il ganglioneuroma retroperitoneale è un raro tumore benigno originante da cellule gangliari, spesso asintomatico. Essendo posto in prossimità di vasi maggiori, in posizione molto spesso difficilmente raggiungibile e non essendo conoscibile preoperatoriamente con sicurezza la reale malignità, l'accesso laparoscopico fino ad oggi è stato scarsamente praticato (sono poche le segnalazioni in letteratura).
Gli AA mostrano nel video il trattamento laparoscopico di un ganglioneuroma retroperitoneale recidivo destro.
La diagnosi è stata incidentale e la diagnostica preoperatoria (US,TC e RMN) ha evidenziato la presenza di una massa in regione "surrenalica" destra, non funzionante. E' stato praticato un miniaccesso open pararettale destro e posizionato un trocar di Hasson. Sono stati quindi posizionati un trocar da 11 sottocostale e da 5 sovrailiaco sull'ascellare media. Dopo aver praticato la lisi delle

aderenze tra fegato e peritoneo parietale destro è stata identificata la loggia renale e,divaricato il fegato con una pinza inserita in un trocar aggiuntivo epigastrico, in regione sottodiaframmatica e surrenalica è stata trovata la lesione,ricoperta da peritoneo. Nonostante il reintervento la massa è stata liberata agevolmente dalle connessioni circostanti e rimossa.

7. Rare Adrenal Myelolipoma Laparoscopic Resection

G.M. Badano[1], L. TImossi[1], E. Daglio[1], E. Rikani[1], T. Montanaro[1], C. Pezzica[1], C. Calcagno[1], C. Introini[1]
[1] Ospedale Evangelico Internazionale (Genova)

A 48-year-old man presented with three days of severe lower back pain and vomiting. Ultrasonography (US) of abdomen showed a hyper echoic curved lesion with regular edge localized in right suprarenal region measuring 9 × 6 cm. Contrast enhanced computed tomography (CT) of abdomen confirmed that the lesion has pressed the liver obliterating the cleavage adipose locoregional. The lesion was inhomogeneous hypodense with branches blurred. The finding was first suggestive of pheochromocytoma. Opposite adrenal gland and kidney were normal. The complete hemogram, blood biochemistry, serum hormonal profile (TSH, S-17 Idrossiprogesteron, DHEA, Testosterone, Delta-4 Androstenedione, basal cortisol, renin) and hormonal level in urine (Cortisol, Cortisol in 24 h, Aldosterone, Metanefrine, Normetanefrine, vanillylmandelic acid) were normal and confirmed the suspect of AM. Laparoscopic adrenalectomy (LA) was performed with transperitoneal approach. This technique offers a good visualization of operative field reducing intraoperative injuries. The mass was surgically removed and then histopathology analysis was performed. Gross examination showed a lesion of 11 × 9 × 3 cm which looked a curved yellow gray colored mass well capsulated. Histhology showed a proliferation of fat cells interposed isles of erythroid tissue. These features confirmed AM diagnosis.

8. Robot- Assisted Laparoscopic Partial Adrenalectomy

G. Simone[1], R. Papalia[2], M. Ferriero[3], S. Guaglianone[3], R. Mastroianni[3], G. Tuderti[4], M. Gallucci[3]
[1] Istituto Nazionale Tumori "Regina Elena", Ospedale San Giovanni Bosco (Roma, Torino)
[2] Istituto Nazionale Tumori "Regina Elena", Università Campus Biomedico (Roma)
[3] Istituto Nazionale Tumori "Regina Elena" (Roma)
[4] Istituto Nazionale Tumori "Regina Elena", Università "Sapienza" di Roma (Roma)

Robot-assisted laparoscopic partial adrenalectomy (RALPA) has recently been advocated to preserve unaffected adrenal tissue.
We report two cases of RALPA , a unilateral aldosteronoma and a unilateral pheochromocitoma, respectively.
Mean operative time was 42 minutes, perioperative course was uneventful, patients were discharged on 2nd postoperative day.
RALPA is an effective, safe and feasible surgical procedure alternative to total adrenalectomy for small, benign adrenal lesions and may decrease the risk of the development of adrenal insufficiency.
Robotic technique may be useful for this procedure, given the need for a meticolous dissection for an optimal preservation of functioning adrenal tissue. A longer follow-up and larger cohorts of patients are required to assess the functional benefits of this technique compared to the standard adrenalectomy.

Sala C

15:30 -17:00

Moderatori:
Giorgio Napodano,
Maurizio Simone

Video 3

Buchi e Sassi

Focus on:
SWL: l'ora della pensione?
M. Simone G. Napodano

1. Trattamento Combinato Anterogrado E Retrogrado Della Calcolosi Nelle Anomalie Di Fusione Renale: Descrizione Della Tecnica E Individuazione Delle Difficoltà

I. Kartalas Goumas[1], E. Itri[1], F. Dell'Aglio[1], F. Pozzoni[1], F. Daddezio[1], C. Gargantini[1], S. Zanetti[2], G. Zanetti[1]
[1] Ospedale Civile di Vimercate (Vimercate)
[2] Ospedale di San Paolo (Milano)

Presentiamo passo per passo la tecnica utilizzata per il trattamento della calcolosi complessa nelle anomalie di fusione del rene. In particolare si evidenziano tre casi clinici trattati per calcolosi complessa: 2 casi in rene a ferro di cavallo e 1 caso in anomalia di fusione con ectopia renale. L'approccio chirurgico consiste nella nefrolitotomia percutanea in posizione supina con contestuale accesso ureterorenoscopico retrogrado. Tutti i casi sono stati valutati preoperatoriamente con una URO-TAC con elaborazione tridimensionale delle immagini, L'accesso percutaneo viene eseguito con puntamento misto ecografico fluoroscopico, approccio che permette la visualizzazione accurata dell'anatomia perirenale e l'anatomia delle cavità renali. La dilatazione del tramite avviene con dilatatori fasciali o con palloncino fino a 24 Ch. L'accesso retrogrago prevede una ureterorenoscopia iniziale con strumento rigido, il posizionamento successivo di una camicia ureterale 12-14 Ch e infine la calicoscopia con un fibro o videoureterorenoscopio flessibile. L'utilizzo anche di un nefroscopio flessibile per via anterograda e l'accesso combinato permette di accedere in qualsiasi punto delle cavità renali, anche in presenza di spiccate anomalie di orientamento o di disposizione spaziale delle cavità renali. Tutti i casi sono stati liberi da calcoli nel follow up. In un caso è comparsa iperpiressia per 2 giorni.

2. Litotrissia RIRS Laser Per Calcolo A Stampo In Eta' Pediatrica

E.. Zhapa[1], A.. Mustafaj[2], F.S. Grossi
[1] Ospedale Italo-Albanese Salus, U. O. Urologia (Tirana)
[2] Ospedale Italo-Albanese Salus, U. O. Urologia (Tirana, Albania)

La chirurgia intrarenale retrograda (RIRS) è un'opzione nota per il trattamento di calcoli del tratto urinario superiore con un eccellente successo. Tuttavia, il trattamento con RIRS LASER pubblicati nei bambini in età prepuberale sono limitati.
Riportiamo il caso di una bambina di 2 anni sottopeso per l'eta', di 10 kg di peso e sindrome di ritardo psico-fisico non specificata, nonostante varie indagini clinico-strumentali e genetiche.
Da qualche mese presentava infezioni urinarie febbrili e diagnosi di calcolo renale destro a stampo che occupa tutti i calici renali nelle proiezioni TAC. (fig 1)
Abbiamo eseguito due procedure di RIRS con strumento flessibile e Litotrissia con fibra laser 200 micron (fig 2) a distanza di un mese una dall'altra, ottenendo una bonifica completa del calcolo a stampo verificato con la TAC un mese dopo la seconda procedura. (fig 3)
Conclusione: La Litotrissia RIRS LASER e' una procedura possibile in eta' pediatrica anche nel caso dei calcoli a stampo ottenendo una bonifica completa. Possono essere necessarie piu' di una procedura. Sono necessari strumenti ureteroscopici flessibili e litotrittore laser.

3. E' Arrivata L'anti-RIRS? Esperienza Iniziale Con La Mini-PCNL

I. Kartalas Goumas[1], F. Dell'Aglio[1], E. Itri[1], F. Pozzoni[1], F. Daddezio[1], C. Gargantini[1], L. Innocenti[1], S. Zanetti[2], G. Zanetti[1]
[1] Ospedale Civile di Vimercate (Vimercate)
[2] Ospedale San Paolo (Milano)

Con questo video si presenta l'esperienza iniziale e gli aspetti tecnici della mini-PCNL (calibro 18 Ch). In particolare si evidenziano le caratteristiche dello strumentario, le indicazioni dei primi 5 casi, la tecnica passo per passo, le difficoltà, i vantaggi e svantaggi iniziali e il razionale d'uso. L'accesso percutaneo 18 Ch permette l'introduzione anche di strumenti flessibili, aumentando maggiormente l'efficacia in termini di clearance dei calcoli. Inoltre l'accesso percutaneo non esclude la possibilità di utilizzo anche di un accesso endoscopico retrogrado combinato. La mini-PCNL può essere considerata complementare della RIRS, mantenendo la mininvasività della procedura ma aumentando l'efficacia. Inoltre la mini-PCNL può essere usata per creare più tramiti nei casi della PCNL per calcolosi renale complessa, riducendo l'invasività della PCNL classica (diametro > 24 Ch).

4. Microperc: A New Frontier

C. Molinari[1], C. Anceschi[1], A. Vincenzoni[2]
[1] Ospedale San Camillo, U.O. Urologia (Roma)
[2] Ospedale Cristo Re, U.O. Urologia (Roma)

Nel video viene mostrata in pratica la tecnica Micropercutanea. Tale tecnica è indicata, in riferimento al minimo danno parenchimale possibile, nella litiasi ampollocaliciale refrattaria a Onde d'Urto, nella calcolosi cistinica e in quella pediatrica. L'utilizzo del laser a bassa potenza e alta frequenza permette di effettuare la polverizzazione del calcolo stesso e l'eliminazione dei frammenti per via naturale, come avviene nel trattamento con ESWL. Nella nostra esperienza è stato utilizzato esclusivamente, nelle 18 procedure effettuate, l'accesso con ago da 1,6 mm di diametro, collegato con il 3 port-luerlock. Questo permette di inserire contemporaneamente nel lume, la fibra ottica da 0.9 mm, la fibra laser da 200 micron e la pompa peristaltica per irrigazione. Si è resa indispensabile la permanenza durante la procedura di un catetere o di una guaina ureterale per evitare una iperpressione nella via escretrice. Non sono stati riscontrati stravasi perirenali in nessuna delle procedure. I calcoli trattati avevano un diametro medio di 18 mm. La percentuale di stone free a 30 gg è stata del 90 %. La degenza media è stata di 1.5 giorni.

5. Due Casi Di Corpo Estraneo Nella Via Escretrice (Frammento Di Stent Calcificato): Debulking E Asportazione Endoscopica

M. Perachino[1], F. Marchesotti[1], C. Lozzi[1]
[1] Ospedale Santo Spirito, S.O.C. Urologia (Casale Monferrato)

Paziente di 63 anni, portatrice di stent bilaterale per ca ovarico sotto controllo dal punto di vista oncologico. Durante la rimozione dello stent ureterale di dx, lo stesso risulta calcificato e per questo motivo si rompe, ed il ricciolo rimane nel rene. Dopo due mesi di terapia alcalinizzante urinaria per os, le calcificazioni si erano risolte completamente ed è stata possibile l'estrazione utilizzando il nefroscopio flessibile con pinza graspit.
Il secondo caso invece riguarda una donna di 78 anni, nella quale era stato posizionato uno stent dopo trattamento laser di calcolosi ureterale. Dopo circa un mese dalla procedura, durante la rimozione dello stent si verificava la rottura dello stesso, con circa 16 cm di stent ritenuti nella via escretrice. Al controllo TC al momento in cui la paziente è giunta alla nostra osservazione, lo stent si presentava completamente calcificato per tutta la sua lunghezza. Dopo due mesi di alcalinizzazione urinaria lo stent risultava ancora completamente calcificato per cui la paziente è stata sottoposta a laserlitotrissia delle calcificazioni intorno allo stent fino a completo debulking ed estrazione dello stesso.

6. Laparoscopic Repair Of Colon Perforation After PCNL

R. Sanseverino[1], O. Intilla[1], U. Di Mauro[1], G. Molisso[1], T. Reafonso[1], C. Cicalese[1], G. Napodano[1]
[1] Ospedale Umberto I - ASL Salerno, U.O.C. Urologia (Nocera Inferiore)

We report a case of a patient undergone a laparoscopic repair of iatrogenic colon perforation after percutaneous nephrolithotripsy.A 48 years old male underwent a percutaneous right nephrolithotripsy for a large renal stone. Postoperatively, the patient complained abdominal pain. An abdominal CT was suspected of bowel perforation. The patient underwent a laparoscopic repair of colon perforation. A transperitoneal approach was performed; four laparoscopic ports were inserted. A nephrostomy tube was identified; It passed throughout right colon and went into kidney pelvis. Colon was isolated. A double lesion was seen on anterior and posterior colon wall (in and out hole). A colorraphy was realized with a double suture on posterior and anterior wall. A renorraphy was performed with Vicryl suture arrested with HemOlok. After performing an abdominal wash, two drains are placed. Operative time was two hours. No transfusion was required. No postoperative complications were encuntered. Patient was discharged on day 10. Acute colon perforation can be safely managed with laparoscopic repair without requiring resection or diversion.

7. Riparazione Di Fistola Vescico-Vaginale Mediante Lembo Di Tessuto Adiposo Labiale: Note Di Tecnica

R. Migliari[1], A. Buffardi[1], P. Gamba[1], H. Ghabin[1]
[1] A.O. Ordine Mauriziano Ospedale "Umberto I", S.C. Urologia (Torino)

Il trattamento delle fistole vescico-vaginali è un problema sul quale gli urologi si sono confrontati per molto tempo. Le fistole ostetriche sono sparite del tutto nei paesi evoluti e sono state sostituite principalmente dalle lesioni traumatiche dopo chirurgia ginecologica benigna, chirurgia oncologica pelvica o per lesioni post-radioterapia. La valutazione preoperatoria delle lesioni deve essere fatta accuratamente per confermare la presenza della fistola, i suoi rapporti rispetto alla vagina, alla vescica ed ai meati ureterali. Infine, bisogna verificare sistematicamente l'assenza di una fistola uretero-vaginale consensuale (10% dei casi), poiché ciò modifica totalmente l'approccio e la tecnica terapeutica. Due tipi di approccio chirurgico vengono abitualmente utilizzati: quello transvaginale e quello transaddominale. La scelta dell'uno o dell'altro dipende dalle caratteristiche della fistola ed in ultima analisi dal chirurgo, che sceglie l'approccio in funzione della sua esperienza.
Nel presente video mostriamo i passaggi salienti dell'approccio transvaginale, tecnica abitualmente impiegata presso il Nostro

Istituto. Previa conferma endoscopica (a mezzo di cistoscopia) della fistola, essa viene progressivamente isolata ed escissa per via transvaginale. Al termine viene mobilizzato un lembo di tessuto adiposo labiale (irrorato dal ramo perineale profondo dell'arteria pudenda esterna) e, dopo tunnelizzazione, il lembo viene portato in sede di fistola ed infine suturato.

8. Riparazione Delle Fistole Vescico-Vaginali Per Via Laparoscopica

G. Zarrelli[1], F. Fontana[1], M. Iannucci[1], G. Mastroprimiano[1], G. Cipollone[1], M. Sala[1], L. Apice[1], D. Paolinelli[1], F. Sereno[1]
[1] Ospedale Sant'Andrea (Vercelli)

Presentiamo un approccio laparoscopico alle fistole vescico-vaginali iatrogene dopo intervento di isterectomia. La fistola urinosa viene documentata mediante cistografia e cistoscopia. Dopo introduzione con tecnica open di un Hasson e 3 trocar operativi si procede a lisi parieto-coliche fino alla completa liberazione del Douglas. Con l'ausilio di un tampone endovaginale si sviluppa il piano di clivaggio fra parete anteriore della vagina e vescica, fino ad identificare l'area del tramite fistoloso. Si procede alla rimozione dei punti di sututra e si asporta completamente il tessuto fibroso peri-fistoloso, con ampia apertura della vescica. La breccia vescicale viene suturata in continua con V-Loc e la breccia vaginale viene suturata in punti staccati, mantenendo le linee di sutura perpendicolari fra loro. Si crea un lembo peritoneale che viene fissato alla parete anteriore della vagina a separazione delle due suture. Il catetere vescicale viene rimosso in 10a giornata previa cistografia.

Domenica 24 maggio

Sala D

Moderatori:
Palleschi
Fiori

15:30 -17:00

Comunicazioni 2

Urologia funzionale

Interventi: Ceresoli

1. A New Method Of Anal Analgesia For Transrectal Prostate Biopsy In Patients With Ano-Rectal Abnormalities

V.. Montanaro[1], A. Di Girolamo[2], A. Pistone[2], A. Calogero[3], V. Altieri[4]
[1] Università Federico II, Centro Trapianti del Rena - U.O. Urologia (Napoli)
[2] Università Federico II (Napoli)
[3] Università Federico II, U.O. Chirurgia Generale (Napoli)
[4] Università di Salerno, U.O. di Urologia (Salerno)

Objective
Evaluate the effectiveness of a new anal anesthesia, combined with the standard periprostatic infiltration for transrectal prostate biopsy, in order to obtain the best analgesic effect in patients with anal disorders

Materials and Methods
From January 2014 to January 2015, 35 consecutive patients with ano-rectal comorbidity were selected (13 stenosis, 16 hypertonic sphincterer, 6 anal fissure) to undergo a transrectal prostate biopsy. This new aesthetic technique provides an infiltration of total 10 ml of lidocaine in the anal submucosa at the four cardinal points; a one minute finger massage of the orifice completes the procedure. According to different cases, a relaxation of the sphincter hypertone or rather a mechanical dilatation of the anal orifice is sufficient to obtain a painless penetration of the probe. A standard periprostatic anesthesia is then provided.
Every step of the procedure was registered on a VAS (Visual Analogue Scale).At the moment of discussion of the biopsy results, a questionnaire was given about analgesic satisfaction and possible alterations of the alveus.

Results
Pain during the anesthetic infiltration was significant (VAS 4.5), mainly with the first injection, with gradual reduction with the

following ones (VAS-I a 7.4 vs VAS-I b 4.7, VAS-Ic 3.6 vs VAS-Id .5). Pain during the probe injection was negligible (VAS 0.8). Pain registered during the periprostatic injection was 1.89. The control of the pain was 0.43 during the sampling. The anal anaesthesiological technique caused vagal manifestation in 3.5%, and anal bleeding (however auto-limiting) in 11.4 %. Only in two cases was not possible to complete the anaesthesiological anal procedure: in the first case because of a severe anal stenosis and in the second case because of the patient's decision to interrupt the procedure. Percentage of general complications related to the procedure didn't differ from the average ones. Moreover, data from the questionnaire show a global satisfaction of 90% and an acceptance to eventually repeat the procedure with analogous methods of 80,7% (growing up to 100% in a subgroup subjected to a previous prostatic biopsy in other centers).

Discussions

Ano-rectal abnormalities, more frequently summarized in the anal stenosis and in the sphincteral hypertone, are responsible of the amplification of algogenic stimulus and result in reduction of the patient's compliance for the bioptic procedure. This often makes necessary postponing the biopsy in order to obtain the suitable preparation of the anal orifice, or rather the recourse to a delayed hospitalization linked to general or spinal anesthesia. All the above can obviously cause an increase in time and costs and sometimes the abortion of the biopsy by the patient. On the other hand, such a procedure was proven to be easy to perform and easily reproducible. Results of VAS show its effectiveness during either the introduction of the probe or during the sampling itself.

Conclusion

The perianal anesthesia technique for infiltration of lidocaina in to the submucosa, should be considered an effective analgesic aid for patients with ano-rectal comorbidities such as anal stenosis , sphincteral hypertone and anal fissure. This procedure was proven to be easy to perform and easily reproducible, with out the need of postponing the biopsy in order to obtain the suitable preparation of the anal orifice, or rather the recourse to a delayed hospitalization linked to general or spinal anesthesia. Furthermore results of visual analog scale show its effectiveness during either the introduction of the probe or during the sampling itself.

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2. Diagnostic And Operative Endoscopy Of The Low Urinary Tract: A New Anesthetic Approach

M. Carrino[1], R. Riccio[2], L. Pucci[1], F. Chiancone[2], G.. Battaglia[1], A.. Oliva[1], F.. Monaco[1], P. Fedelini[1]

[1] **A.O.R.N. A. Cardarelli (Napoli)**

[2] **A.O.U. Federico II (Napoli)**

Objective

The endoscopic procedures of the low urinary tract are one of the urologists's most common procedures, but not always well tollerated particurarly by the male patients. Urethrocistoscopy, urethral dilatation, endoscopic removing of urethral stones, electrocution of urethral warts and many other endoscopic procedures of the low urinary tract are minimally invasive due to flexible instruments, but many patients still feel those procedures as a painfull moment. The anesthetic approaches are well documented, but still not standardized: they space from the lidocain gel to the intraspongiosum block, from the spinal anesthesia to the narcosis (1,2,3). We intend, with this new approach, to make safer and painless the endoscopic procedures, avoiding useless or risky anesthesia. The procedure requires an endourethral injection of an anesthetic mix made by Prilocain 5%, Lidocain 10% and a common uretral gel, made in foam and injected 5 to 15 minutes before the endoscopic procedure.

Materials and Methods

We selected 68 patients, all man with a median age of 43±2.6 years, whose needed endoscopic procedures of the low urinary tract from May 2014 to Dicember 2014. 7 of them underwent urethral dilatation, 23 observative cistoscopy, 2 urethral stone removing, 3 bladder neck incision, 16 internal urethrotomy (anterior urethra), 12 ureteral stent removing and 5 electocution of urethral warts. The anesthetic foam is made by 4 ml of Prilocaine cream 5%, 10 ml of Lidocaine solution 10%, 6 ml common urethral gel and 2 cc of air mixed by a three way stopcock connector for 1 minute. Right after the mixing, the compound was injected into the urethra and blocked there by a penis clamp from 5 to 15 minutes. We ask the patients to quantify the pain they felt by the VAD scale (points 1 to 10) just after and 3 hours after the end of the procedure.

Results

For no one of the patients was required the suspension of the procedures due to the pain or to switch to another anesthetic procedure. The mean VAD's value just after the procedure was 2,47±1,31 and the mean value after 3 hours was 2,31±1,32. In both groups just the 5,8% of the patients had a VAD score ≥5. In literatur is described just in four cases a local ulceration and desquamation of gengival mucosa after a 30-minute application of EMLA (0.3 g) as a topical anaesthetic (4). In no one of the 68 patients was recorded short term advent events as stricture, rash, ulceration.

Discussions

In health services and medical care, the actual costs of hospitalisationand not less the risks connected with spinal anesthesia, or narcosis, need a different approach, at least for the routine endoscopy that may be tolerated by the patient. In our study we found that the pain tolerance is effective and justify a minimal invasive anesthesia. This effectivenes is due to to the charateristics of the foam that has this kind of grip to the urethral mucosa and for his stay into all the urethral canal urethal , even up to the bladder neck, that give to the anesthetic compounds this kind of anesthetic power.

Conclusion

The limit of our study is that is just a safety and tolerability study, where we have insured that the anesthetic power of the foam we created was good enough to proceed with the endoscopy, and has no kind of adverse effect.

Another limit of our study is that it makes no comparison with all the other kind of anesthetic procedures. Despite this limits the power of this local anesthesia is surprising and should develop sufficient interest to encourage further studies, particularly the long term effects on the urethral mucosa and maybe a possible effect on bladder for other procedures.

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3. Prostatic Artery Embolization For Patients With Lower Urinary Symptoms Due To Benign Prostatic Hyperplasia: Preliminary Results From A Single Center

G.C.. Rocca[1], L.. Zattoni[2], M. Bernabei[1], C. Ballista[1], G. Benea[2], M. Simone[1]
[1] Ospedale del Delta AUSL Ferrara, Divisione di Urologia (Lagosanto)
[2] Ospedale del Delta AUSL Ferrara, Divisione di Radiologia (Lagosanto)

Objective
The aim of this study is to investigate safety and clinical outcome of prostatic artery embolization (PAE) in patients with symptomatic bladder outlet obstruction (BOO) due to benign prostatic hyperplasia (BPH).

Materials and Methods
PAE is a one-day-stay procedure, performed by an interventional radiologist. Some day before an AngioCT is accomplished, in order to evaluate the detailed anatomy of the hypogastric region. Before and/or during embolization, analgesic and anti-inflammatory drugs are administered intravenously. Embolization is performed under local anesthesia with a unilateral access approach, in most cases, via the right femoral artery. A 5-F Cobra-shaped catheter is introduced into the right femoral artery to catheterize the left hypogastric artery and then its anterior division. Angiography of the anterior division of the hypogastric artery is performed in the ipsilateral oblique view to visualize the anatomy of prostatic arteries. The prostatic vessels are then selectively catheterized with a 3-F, coaxial microcatheter (Progreat Terumo TM) or with a Renegade microcatheter and a 0.14 guidewire (Boston ScientificTM). Another angiogram is obtained to confirm the position of the catheter in the prostatic artery before embolization. The endpoint chosen for embolization is slow flow or "near stasis" in the prostatic vessels, with interruption of the arterial flow and prostatic gland opacification. From January 2013 to January 2015 we performed PAE in 11 consecutive patients (mean age 79.3 years, range 75-84 y) affected by clinical BPH and lower urinary tract symptoms (LUTS) refractory to medical treatments (3 of them had an indwelling bladder catheter). Magnetic resonance imaging (MRI) or transrectal prostatic ultrasound (TRUS), uroflowmetry (UFM), International Prostate Symptoms Score (IPSS) were performed pre-operatory and at 3, 6 and 12 months to evaluate clinical and functional outcomes. Clinical success was considered as symptoms improvement (IPSS reduction at least 25% of the total score and lower than 15 points), quality of life improvement (reduction of Qol at least 1 point and or equal or lower to 3 points) and no need of medical therapy or any other treatment after PAE.

Results
Bilateral embolization was technically successfully in 9 out of 11 patients (81.8%). Clinical success was reported in 88.8% of patients (8/9 pts). All patients had their catheter removed after the procedure (median 13 days, range 10 to 21), but one of them experienced acute urinary retention, requiring again an indwelling bladder catheter. Two patients required a longer hospital stay due to transient fever. We observed a reduction of International Prostate Symptoms Score at 12 months (12.3 points), a prostate volume reduction (mean 24%), a reduction of Qol (1 point) and an increase of Qmax (mean 4,3). No major complications were reported.

Discussions
Although several drugs are presently avalaible for the management of BPH, in case of progression the disease can be treated only by surgery, endoscopic or open (in case of larger prostates). PAE can represent an attractive mininvasive alternative, requiring local anesthesia and short hospital stay. Anyway, it requires a highly skilled professional to selectively catheterize the distal branches of the hypogastric arteries, mainly in vasculopatic, elderly patients. Although the procedure is presently offered to the high-risk subject, early experiences adumbrate better results for younger and healthier men, with a more patent arterial system, prone to an extensive occlusion of the prostatic arterial supply.

Conclusion
PAE appears to be a safe and feasible (although technically demanding) nonoperative procedure. Preliminary results indicate a potential for meaningful clinical benefits, mainly in larger prostates. Patients can be treated safely by PAE with low rates of side effects, reducing prostate volume with clinical symptoms and quality of life improvement. A multidisciplinary approach with urologists and interventional radiologists is essential to achieve better results. Nevertheless, our experience is too limited to draw extensive conclusions, although presently it is encouraging in terms of short term outcome. We showed clinical benefits, feasibility and safety of this procedure, although more randomized clinical trials are necessary to validate the efficacy and safety of PAE.

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4. Green Light Laser In Patients With Prostatic Hyperplasia Treated With 5-Alpha Reductase Inhibitors

A. Fandella[1], S. Guazzieri[1]
[1] Casa di Cura Giovanni XXIII (Monastier di Treviso)

Objective
20 -30% of patients with benign prostatic hyperplasia (BPH) are on long-term treatment with 5-alpha reductase inhibitors (5-ARIs). 5 Alpha-reductase inhibitors (5ARIs) reduce angiogenesis in benign prostatic tissue.The modification of the tissue of the prostate by 5-ARIs could alter the action of Green Laser. Our experience patients treated with 5- candidates for photoselective vaporization of the prostate with green laser.
To assess, using a retrospective study based on our experience, whether long-term treatment (longer than 6 months) with 5-alpha reductase inhibitors decreases effectiveness of photoselective vaporization of the prostate with green light laser in BPH.

Materials and Methods
We sought to determine whether the efficacy and efficiency of 180W GreenLight HPS (American Medical Systems, Inc) laser photoselective vaporization prostatectomy (PVP) is compromised in patients on chronic 5α-reductase inhibitor (RI) therapyFrom 75 patients undergoing Green Laser vaporization of the prostate between November 2012 and February 2015. Their average age, prostate size, and International Prostate Symptom Score (IPSS) were 72.3±7.3 yr, 52.4±34.0ml, and 25.9±4.0, respectively. Of these, 25 patients (33,3%) had been treated with 5-ARIs for at least 6 months, and the remaining 50 patients (66,6%) were used as controls. A retrospective study was conducted to compare the pre- and postoperative clinical and functional parameters of patients with and without prior 5-ARIs therapy.

Results
No statistically significant differences were found between the treated and control groups in preoperative prostatic volume (50 mL vs 49 mL), IPSS (17.6 vs 17.8), postvoiding residue (16% vs 18%), or PSA (1.4 ng/mL vs 2.2 ng/mL). Similarly, while differences were seen in energy spread (180 kJ vs 175 kJ for the treated and control groups respectively) and operating time (63 min vs 57 min), these were not statistically significant. No between-group differences were found either in clinical or flow rate parameters one month after surgery (IPSS 13.8 vs 14 and Qmax 13.9 mL/s vs 14.5 nL/s in the treated and control groups respectively). Surgeons reported a better visualization of the endoscopic field that was attributed to less bleeding during the procedure.

Discussions
One of the major advantages of KTP laser is the blood less nature of this technology. PVP laser vaporization was performed successfully in 66 patients with high cardiopulmonary risk, having presented with an American Society of Anesthesiology score of 3 or greater. In addition, 29 patients were being treated with ongoing oral anticoagulant therapy or had a severe bleeding

disorder. No major complication occurred intra-operatively or postoperatively and no blood transfusion was required. Post-operatively, 77% patients did not require irrigation. Average catheterization time was 1.8 ± 1.4 days. Two patients required reoperation due to recurrent urinary retention. Many authors have proposed PVP as a treatment option in men who are at high risk for clinically significant bleeding.

Conclusion

Our experience suggests that 5ARIs do not have a detrimental effect on the efficiency and efficacy of laser PVP. There were no statistically significant differences in peroperative and preoperative parameters between patients with and without treatment with 5-alpha reductase inhibitors.The efficacy and efficiency of PVP with the GreenLight HPS laser are not negatively affected in patients on chronic 5αRI therapy Photoselective vaporization of the prostate with green light laser is a safe and effective technique in patients treated with 5-ARIs.

the only limitations could be the short follow-up lack of a correct hystology in every patients, in fact only in hight risk patients (elevated PSA or elevated PSAv) we take some biopsy at the end of the procedure.

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5. Two-Sided Dorsal Plus Ventral Oral Graft Bulbar Urethroplasty: Long-Term Results And Predictive Factors

E.. Palminteri[1], G.B.. Di Pierro[2], E.. Berdondini[1], G.. Cucchiarale[1], G.. Milan[1], F.. Valentino[1], G. Antonini[2], G. Franco[2], U.. Ferrando[1]

[1] Centro di Chirurgia Uretrale, Clinica Cellini, Humanitas (Torino)

[2] Università "La Sapeinza" Dipartimento di Ostetricia, Ginecologia e Urologia (Roma)

Objective

To evaluate long-term outcomes of the two-sided dorsal plus ventral oral graft (DVOG) urethroplasty by preserving the narrow urethral plate in tight bulbar strictures and investigated which factors might influence long-term outcomes.

Materials and Methods

We performed a retrospective study including 166 patients who underwent two-sided dorsal plus ventral oral graft (DVOG) urethroplasty between 2002 and 2013 for tight bulbar urethral strictures at our high-volume institution. Tight strictures were characterized by a very narrow residual urethral plate (width <3 mm). All surgical procedures were performed by the same urologist (E.P.). Inclusion criteria of the study were bulbar strictures treated with DVOG urethroplasty. Exclusion criteria were penile or panurethral strictures, obliterative traumatic strictures, lichen sclerosus, and failed hypospadias. The strictured urethra was opened ventrally; the exposed urethral plate was incised in the midline and augmented dorsally and ventrally using two oral grafts. Outcome was considered a failure when any postoperative instrumentation was needed. According to stricture length patients were classified in three groups: ≤1.5 cm (Group 1), >1.5 cm and ≤3.9 cm (Group 2) and ≥4 cm (Group 3). Time to failure was analyzed using Kaplan-Meier estimates and Cox regression.

Results

Stricture length was ≤1.5 cm in 41 patients (24.7%; Group 1), >1.5 and ≤3.9 cm in 99 (59.6%; Group 2), and ≥4 cm in 26 (15.7%; Group 3). Mean±SD stricture length was 2.6±1.3 cm (range: 1-10). A total of 127/166 patients (76.6%) have undergone previous treatments before referral to our center: internal urethrotomy in 64 (38.6%), urethroplasty in 2 (1.2%), dilatation in 3 (1.8%), multiple procedures in 58 (35%) patients. In patients previously treated with urethrotomy, the number of urethrotomies ranged from 1 to 20 (mean: 3). Median follow-up was 47 mo (IQR: 33/95.5). Of the 166 patients, 149 (89.8%) were successful and 17 (10.2%) were failures. Median time to failure was 24 months (IQR: 12/36). Most of the failures (90%) were observed during the first 5 years of follow-up, afterward the success rate remained stable. The stricture length was a significant predictor of surgical outcome (odds ratio:1.743 per cm; CI: 1.2-2.5; p<0.001); patients with an urethral stricture >4 cm presented a higher risk of late failure. Age, stricture etiology, and previous treatment were not significant predictors of surgical outcome.

Discussions

Surgical treatment of urethral stricture diseases is a continuous evolving process.

Short and/or sub-obliterative bulbar strictures are traditionally treated by excision and primary anastomotic urethroplasty, while longer strictures are usually repaired by patch graft urethroplasty preferably using oral mucosa. Anyway, the shortening of the urethra and the vascular injury following urethral transection may lead to an increased risk of sexual complications, explaining the new trend to use the patch grafting even in short strictures. However, the graft technique is mainly suggested in cases which require simple augmentation of the urethral plate without excision of the scarred urethra, while the question remains if this procedure is also suitable to treat tight bulbar urethral strictures including a particularly narrow area. The best approach to treat this kind of strictures, reducing at the same time the risk of complications related to traditional end-to-end anastomosis, is still an open problem with several proposed solutions. Guralnick et al. suggested the graft-augmented anastomotic repair with the aim of reducing the urethral chordee. The technique consists in the excision of the narrow portion and anastomosis on one-side of the urethra in conjunction with a patch graft on the opposite urethral side. A 90- 93% success rate was reported by using this procedure. Recently, Andrich described a new anastomotic repair of bulbar urethra strictures without transecting the urethra, whereas McAninch and Barbagli favoured the ventral grafting stating that excision of the narrow urethral plate was unnecessary because this grafting procedure provides a new sufficiently wide urethral plate. Following the current trends of urethra-sparing surgery, we introduced the concept of a two-sided dorsal plus ventral grafting for very narrow strictures where a single graft would not be sufficient to obtain a lumen of adequate width and the transection may compromise the urethral vascularization and length. Our study shows that most of the failures (90%) were observed during the first 5 years postoperatively, afterward the success rate remained stable. This claims the need for strict follow-up especially in the first 5 years. Similarly to other studies, age, stenosis etiology and previous treatments (both urethrotomy or urethroplasty) were not significant predictors of surgical outcome. Conversely, stricture length was identified as an independent risk factor for failure. The risk ofaving a re-intervention was increased by 70% for cm of urethral stricture length. Strictures > 4 cm (Group 3) presented a higher risk of failure when compared to strictures< 4 cm.

Conclusion

Bulbar urethral strictures are treated by various reconstructive techniques. Short or obliterative strictures may be treated with excision and anastomotic urethroplasty, while for longer strictures patch urethroplasty preferably using an oral graft has been advocated. However, since transecting procedures might impair sexual function probably as a consequence of the vascular damage and urethral shortening, new non-transecting and urethra-sparing techniques have been promoted for short stenoses

Our study demonstrates that in patients with tight bulbar strictures, the two-sided dorsal plus ventral oral graft urethroplasty

provides high long-term success rates which may decrease primarily during the first 5 years; afterward the success rate remains stable.
The stricture length is an independent predictor of failure.

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6. Kulkarni Dorso-Lateral Graft Urethroplasty: A Mid-Term Follow-Up Study

E. Palminteri[1], G.B.. Di Pierro[2], E.. Berdondini[1], G.. Cucchiarale[1], F.. Valentino[1], G.. Milan[1], P. Grande[2], C. Cristini[2], U.. Ferrando[1]

[1] Centro di Chirurgia Uretrale, Clinica Cellini, Humanitas (Torino)

[2] Università "La Sapeinza" Dipartimento di Ostetricia, Ginecologia e Urologia (Roma)

Objective
To report mid-term outcomes of Kulkarni dorso-lateral graft urethroplasty for anterior urethral strictures.

Materials and Methods
Between 2009 and 2013, 69 men(mean age 50 years) with anterior urethral strictures underwent dorso-lateral graft urethroplasty. The stricture site was penile in 34(49.2%%), bulbar in 11(15.9%) and peno-bulbar in 24(34.9%). The cause of stricture was iatrogenic in 18 cases(26.2%), unknown in 22(31.8%), trauma in 2(2.9%), catheter in 19(27.5%) and lichen sclerosus in 8(11.6%). Of 69 patients, 5(7.3%) men had previously undergone dilatation, 9(13.1%) urethrotomy, 5(7.3%) urethroplasty and 38(55.1%) multiple treatments. Mean stricture length was 5 cm(range: 1-17). The urethra was dissected from the corpora cavernosa only along the left side, starting from the distal tract of the strictured urethra. Along the right side, the urethra remained attached to the corpora cavernosa for its full length, thus preserving its lateral vascular blood supply. The distal extent of the stenosis was identified, the dorso-lateral urethral surface was incised along the midline and the urethral lumen was exposed. The stricture was then incised along its entire length by extending the urethrotomy 1 cm both distally and proximally in the healty urethra. The urethra augmentation was performed by preputial skin(PS) and/or buccal mucosa(BM) grafts, that were previously harvested and trimmed to an appropriate size, then fixed over the tunica albuginea with quilting 5/0 polyglactin sutures. The right margin of the graft was sutured to the left margin of the urethral mucosa plate with interrupted 5/0 sutures on a 18-Fr catheter. The urethra was rotated to its original position over the graft. Voiding cysto-urethrography was performed upon catheter removal, 3 weeks after surgery. Follow-up assessment included uroflowmetry and urine culture every 4 months in the first year and annually thereafter. Urethrography and urethroscopy were performed in patients presenting any new/residual obstructive symptoms or peak flow rate(Qmax) < 14 mL/s. Clinical outcome was considered a failure when any postoperative procedure was needed, including dilatation.

Results
Employed grafts were BM in 29 (42.1%) patients, PS in 38 (55.1%) and BM + PS in 2 (2.8%). The BM graft harvesting was monolateral in 25 (80.6%) patients and bilateral in 6 (19.4%), respectively. Mean graft length was 6.1 cm (range: 2.5-17). Mean follow-up was 30 months (range: 12-51). There were no postoperative complications such as wound infections, hematomas or bleeding. At voiding urethrography following catheter removal at 3 weeks, in 7 (10.1%) cases a mild leakage at the graft anastomosis was observed. However, this resolved spontaneously with a 12-Fr catheter for 3-4 additional weeks. Of 69 patients, 61 (88.4%) were successful. The 8 (11.6%) failures were treated by perineostomy in 5 cases with long recurrences and urethrotomy in 3 patients with stenotic rings.

Discussions
In 1996, Barbagli introduced the use of the dorsal grafting by the dorsal urethrotomy underlining two advantages: the corpora gives good mechanical and vascular support for the graft; furthermore, it preserved the integrity of the spongiosum on its abundant ventral side. However, in the original dorsal graft technique the urethra needs to be completely freed from the corpora. This step might be difficult in scarred urethras which are often firmly attached to the corpora; furthermore, especially in long or recurrent ischemic strictures, the extensive urethral mobilisation from the corpora with the interruption of the lateral blood supply (circumferential arteries) may even more compromise the vascularization of a diseased urethra. In this context, to avoid the excessive circumferential mobilisation of the urethra and preserve its controlateral vascular supply, Kulkarny proposed a less aggressive dorso-lateral approach. This technique is part of the new trend to reduce the surgical trauma of a technique and subsequent recurrences and complications. Our study with a mid-term follow-up confirms that the dorso-lateral grafting represents an effective and minimally invasive reconstructive approach for anterior urethral strictures.

Conclusion
In the last two decades, patch grafting procedures have spread rapidly and the dorsal or ventral graft placement using dorsal or ventral urethrotomy approaches has become a contentious issue. In this context, Kulkarni has recently proposed a less invasive one-sided dorso-lateral graft urethroplasty to avoid the full circumferential mobilisation of the urethra and to preserve its controlateral vascular supply. He described the technique with the use of oral mucosa and as a valid alternative to a staged procedure. Our study with a mid-term follow-up confirms that the dorso-lateral grafting represents an efficient and less invasive reconstructive approach for anterior urethral strictures.

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7. Platelet Rich Plasma (Prp) In Three Cases Of Complex Recurrent Urethral Stenosis

M. Moretti[1], M. Piccardo[1], G. Ricciotti[1], W. Bozzo[2]
[1] Ospedale Villa Scassi ASL 3 Liguria (Genova)
[2] Ospedale di Sanremo ASL 1 Liguria (Sanremo)

Objective

Urethral stenosis after surgery are common and challenging for urologist; recurrence rate are high and variable owing to reports and surgeons. We tried PRP injection in case of recurrent stenosi to evaluate clinical impact on .

Materials and Methods

Three male patients, age 50 -67, who underwent previous surgery (salvage radical prostatectomy, simple open prostatic surgery and TURP) with high recurrence rate urethral stenosis. First patient was treated with cold incision of urethral-vesical anastomosis. Remain patients experienced scar in bulbar urethra: all were operated by cold knife incision to the perianastomotic fat or periurethral tissue. First patient recurred about every months, the latter two every two-three monts. Patients received up to 15 -20 cc of autologus PRP in the scar and the close tissue by Orandi needle; then we performed incision. Catheter was maintained up to three days, the patients discharged the days after procedure, performed in spinal anaesthesia.

Results

We observed no complication in injection site, nor systemic effects. Bleeding was not more abundant than usual scar incision procedure and no patients needed bladder irrigation. Also catheter was well-tolerated with no hematuria or fever. The recurrence rate improved up to six months after two injection and incisions in the first patient. Scar tissue also was softer and shorter; patient well tolerated both procedures. Also the patients with bulbar stenosis went well and one is actually free of scar. We evaluated all of them by uroflow, thatconfirmed the subjective improvement referred by patient, and urethroscopy. Follow-up ranges 6 to 12 months.

Discussions

Urethral stenosis has high recurrence rate owing its physiopathology: fibrosis of periurethral tissues outside the lumen. Open urethral surgery acts by removing the scar or inserting different autologue tissues to enlarge the lumen; procedures often includes plate incisions. PRP is used in many clinical setting: to date we have no reports in urethral stenosis. We used PRP in stenosis, as plastic surgeons use it in skin scar; rationale is logic and our early results are promising. The patient with scar after open oncologic surgery, usually challenging for urologist, is going well but good results are observed in the three cases reported.

Conclusion

Adjuvant theraphy after stenosis incision includes cortisosteroid injection and laser therapy with variable results: the goal to reduce the recurrence rate of scars in periurethral tissue by laser is not confirmed. Only one study tested steroid injection after electric incision of strictures following radical prostatectomy. The experience we reported is limited to three cases with high recurrence rates and hard scars: these case are usually difficult and our results, even with short follow-up, are promising. No side-effect or risks, low costs and repeatability encourage to carry on this way and try to apply in lichen stenosis and stenosis recurrence in the short term or immediately after removal of the urethral catheter.

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8. Role Of Perineal Bulbourethral Sling Implant And Neurosacral Modulation For The Treatment Of Urinary Incontinence After Radical Prostatectomy. Our Experience

A. Ceresoli[1], A. Naselli[1], E. Tondelli[1], G. Grasso Macola[1], M. Follini[1], P. Graziotti[1]
[1] Ospedale San Giuseppe, Multimedica (Milano)

Objective

Urinary incontinence following radical prostatectomy is mainly a consequence of external sphincter impairment. However a concomitant urge component can be present and best assessed only after an appropriate “restitutio ad integrum” of the sphincter function. Hence, patients, who have undergone prostatectomy, with a residual urinary incontinence following the implant of perineal bulbourethral sling, represent the experimental model available in clinical practice. The partial effect achieved after this surgery could be due to the presence of minor or latent functional bladder dysfunction, which becomes dominant after the surgical correction of the sphincter defect. The rationale of this analysis is the mid term evaluation of the efficacy of sacral neuromodulation, as treatment for urge urinary incontinence in patients who have undergone a perineal bulbourethral sling implant after prostatectomy.

Materials and Methods

From January 2010 to December 2011, 77 patients referred to our center for post radical prostatectomy incontinence. Patients were routinely submitted to office cystoscopy and urodynamic assessment. Cases characterized by partial intrinsic sphincter deficiency (defined as functional length less than 2 cm, RLPP test < 40 cm H20, MUCP < 45 cm) and mild incontinence (pad test lower and upper limits respectively 20 and 500 mL) underwent transobturatoy tensive perineal tape placement [1]. In all 49 patients had surgery. Twenty-two of them regained continence (no or one pad per day), the remaining 27, who declared a partial or no improvement were submitted again to urodynamic evaluation. Twenty-five cases with a reduced bladder compliance were candidates to sacral neuromodulation. Twenty-two were implanted with sacral neuromodulator (InterStim – Medtronic) [2] which implies two distinct procedures: 1) a temporary implant to test efficacy and then, after 2 – 4 weeks, 2) the permanent implant. The procedures were performed under combination of x-ray and electrical stimulation guidance in local anesthesia. One temporary implant was removed for infection, one for malfunction. Patients were followed up with interview, physical examination, ICIQ-SF questionnaires and pad test before and post implantation, at 3 months and then yearly. Two patients died within 2 years after the implant, one for disease and one for unrelated causes whereas 18 had at least 2 year follow and were object of the report. ICIQ-SF and pad test findings pre and post implant were subjected to a Student’s T –test for paired samples for analysis of statistical significance. The test was two tailed for ICIQ-SF assessment (in the assumption of eventual worsening of quality of life after implant) and one tailed for the pad test (in the assumption that nothing changes in the worst scenario after implant). Significance level was fixed at 0.05.

Results

Two years after implant overall 12/18 (66%) had a complete or partial response to the treatment. Ten out of 18 (55%) declared to be satisfied and happy to have decided to be treated. Four patients were completely continent (no pad), four quasi-continent (1 pad), four improved of at least 50% (namely halved the number of pads used before the implant) and five improved of at less than 50% or not responded at all respect to pre implant assessment. The pads’ number was reduced significantly from 4.3 ± 2.3 to 1.9 ± 1.6 ($p<0.001$). The ICIQ-SF score decreased significantly from 16.3 ± 3 a 10.9 ± 4.5 ($p<0.001$).

Discussions

Return to continence in about half of patients treated shows the potential effectiveness of sacral neuromodulation as treatment of the urge incontinence component post-radical prostatectomy after sling implant. Moreover, satisfaction rate, expressed by a direct and precise question to the patient was significantly high considering the general dissatisfaction underlying post prostatectomy continence and a “failed” sling implant. The impression obtained by interviewing the patients is substantiated by an objective and statistically significant improvement in ICIQ-SF score and number of pads used. We reported ours results over a period of 2

years thus suggesting the achievements are definitive. Moreover benefits have been reached with a mini-invasive one day surgery procedure performed in local anesthesia with the guidance of electrical stimulation and fluorescence which is not undermined by significant complications

Conclusion

In this series of selected patients, the residual urinary incontinence was treated effectively with sacral neuromodulation when the urodynamic evaluation, performed after the implant of the sling perineal bulb, showed a reduction in bladder compliance. The 2 year follow up is not yet enough to consider definitively stable the results achieved even if it will likely remain unchanged. Most important the procedure is safe, mini invasive and performed in local anesthesia. Further studies are needed to validate the technique and its results. By the way our report should encourage centers specialized in male incontinence treatment to perform dedicated clinical trials.

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9. ATOMS The Urinary Incontinence Answer?

L. Timossi[1], G.M. Badano[1], C. Pezzica[1], T. Montanaro[1], E. Rikani[1], C. Introini[1]
[1] Ospedale Evangelico Internazionale (Genova)

Objective

To Evaluate the medium and long term results after ATOMS implantation and the improvement in patients Quality of life.

Materials and Methods

We have analyzed the medium and long-term results of implant prosthetic sphincter ATOMS with a follow up of at least 6 months and a median follow-up of 12 months (6 to 36 months). Patients treated 16 patients with ATOMS, all previously undergone open radical prostatectomy , 3 of these were underwent adjuvant RT after surgery who presents a mild-severe incontinence. The average use of pad after prostatectomy, for at least 12 months after surgery, was 3 (range 2-6). In all ATOMS implantations we had no postoperative relevant sequelae, patients were discharged after 48 hours, in the first 6 cases, and 24 hours, in the following 10, after surgery.

Results

Upon removal of the bladder catheter 75% of patients (12) had already an improvement in urinary continence pad daily with a decrease of about 20% . The first injection in the prosthesis was performed in all patients with 10cc of saline 20 days after surgery. Following this the 43,75% of the patients (7 patients) were continents. At the second control after surgery at day 40 9 patients that still have urinary incontinence have been injected yet a further 5 cc of normal saline with improvement of continence in all patients. 6 patients were completely continent at this point still using the remaining 3 1 2 die pad while the other two first die pad. At 60 days of surgery were injected to the 3 patients in which still remained urinary incontinence have increased the cuff inflation further 5 cc reaching continence in all treated cases. After about 6 months after surgery all patients were to be treated by us continents only 2 patients still using one die pad as security.In 3 cases the first injection results impossible because the port was dislocated and we need to perform a small incision over the scar with a local anesthesia to replace the port in the correct position. All patients had a significantly improved Qol.

Discussions

Atoms implantation results easy to perform and requires a short learning curve with low risks for the patients.The possibility to adjust the urethral compression during the time allow the urologist, and also the patience to improve urinary incontinence on demand even after several months with a safety procedure perform in office without the need for surgical intervention as is instead necessary with other implant. The results of our study show that the urinary continence has been reached in all patients treated by this implant and the medium and long term results encouraging us to continue the use of this disposable.

Conclusion

Prostate cancer is the sixth most common cancer worldwide and will include about 30% of all malignancies in men.Whit the increase of the diagnosis is correlated an icreas of surgical treatment and their related sequelae. Urinary incontinence is still today one of the late sequelae after radical prostatectomy that most affect the quality of life of the patient. In our experience this device results easy to implant and safety for the patient. We believe that ATOMS rappresent the most suitable solution in the treatment of severe and moderate incontinence. The possibility of adjusting the compression exerted urethral allows to achieve excellent late results than with other principals could not be obtained.

10. Influence Of Obesity On Surgical Outcome Of The Transobturator Tape For Stress Urinary Incontinence

G. Masiello[1], C. Curatolo[1], M.G. Carbonara[1], M. Altomare[1]
[1] Ospedale Civile di Molfetta, S.C. Urologia (Molfetta)

Objective

Stress urinary incontinence is the most prevalent disease in middle-aged women. Obesity is one of the most important risk factors for the development of urinary incontinence. There are limited data available concerning safety, efficacy and outcome of TOT procedure in obese females. The aim of our study was to evaluate the influence of obesity on clinical aspects, quality of life (QoL) and outcomes in patients with stress urinary incontinence (SUI) who underwent transobturator tape (TOT) surgery.

Materials and Methods

We evaluated 30 patients who underwent TOT in our hospital between january 2008 and july 2014, stratified by BMI in normal (< 25) and obese (≥ 25) group. We compared pre and postoperative evaluations, including subjective and objective outcome of TOT, complications, and QoL. They all underwent conservative therapy, including biofeedback, electrical stimulation for three months before surgery. All patients were urodinamically diagnosed with SUI; patients with mixed symptoms were escluded. Patients were escluded if PVR exeeceded 100ml, or had detrusor overactivity or cystocele. We performed 14 TOT using "Monarc ", and 16 using TVTO by Gynecare. The procedures were performed with patient in high lithotomy position and under spinal anesthesia. All receveid antibiotic therapy, and were instructed to avoid exercise, sexual intercourse for 4-6 weeks postoperatively. Intraoperative events included bloodloss and time of implantation. In postoperative evaluation we utilized ICIQ-SF, and pads used, not urodinamics. Cure was defined as no leakage (dry), improvement was defined as a reduction of 50% or more in the use of pads. Outcome measures reported include continence status, pad use, urinary urgency, PVR.

Results

30 female patients with SUI underwent TOT. According to their body mass index, 14 were in group A (normal weight< 25Kg/m2) with a mean age of 60.35 (46-71) and 16 in group B (over weight ≥ 25Kg/m2) with a mean age 59.5 (48-75). The median BMI was 21.94 (20.56-23.01) in group A, and 29.59 (27.39-32.02) in group B. The patients were followed up between 4 and 48 months with a median follow up of 30 months. No significant differences were evaluated in time of surgical procedure between the groups: 39.9 min (28-70min) in group A and 39.5 (28-75) in group B. After surgery the used pads/day significantly reduced from baseline 4.3 (3-5) to 0 (0-2), and no significant differences were reported between the two groups. Questionaries on QoL (ICIQ-SF) showed no significant differences between groups. No intraoperative complication were reported. We described de novo urge in 2 women (1 for group) and 1 temporary retention in group B.

Discussions

This study showed that TOT procedure was safe and effective for treating SUI regardless of BMI. The quality of life and use of pads/die were similarly improved in two groups, and number of complications was not influenced by BMI. Although obesity is a well estabilished risk factor for the development of SUI, does not influence outcome of TOT procedure. A great number of reports shows a good success rate of TVT surgery in obese patients, and shows that obesity does not influence the outcome. In other studies using transobturator tape procedures no association between BMI and surgical outcome was found. (2,3) In our study we found the same results in few cases. In our opinion we needed long term follow up and more cases to evaluate the exact influence of obesity in TOT outcomes.

Conclusion

Stress urinary incontinence is the most prevalent disease in middle-aged women. Many studies showed that TOT procedure is safe and effective for treating SUI. Obesity is one of the most important risk factors for the development of urinary incontinence. There are limited data and few studies available concerning safety, efficacy and outcome of TOT procedure in obese females. In this study we showed that TOT procedure is safe and effective; it can be applied even in obese SUI patients with high expetations, although long term follow up and a large number of patients are necessary. The recurrence ra**Moderatori:**

Palleschi Fiori

te, complications, and satisfaction of patients were not influenced by BMI.

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11. Laparoscopic Sleeve Gastrectomy Effects On Overactive Bladder Symptoms

G. Palleschi[1], A.L. Pastore[1], A. Ripoli[1], A. Leto[1], A. Fuschi[1], A. Carbone[1]

[1] Università "La Sapienza" di Roma, Facoltà di Farmacia e Medicina, Dipartimento di Scienze e Biotecnologie Medico-Chirurgiche, U.O.C. Urologia (Latina)

Objective

Morbidly obese patients may experience lower urinary tract symptoms. However, most studies focus only on urinary incontinence, with little regard to other symptoms as those suggestive for overactive bladder syndrome. Laparoscopic sleeve gastrectomy (LSG) is commonly used to treat obesity; this procedure is effective, safe, and capable of reducing the impact of comorbidities associated with severe increase in body weight. Therefore, we investigated if LSG improves overactive bladder symptoms in morbidly obese patients.

Materials and Methods

We prospectively recruited 120 morbidly obese patients (60 men, 60 women), evaluated by history taking, comorbidity assessment, physical examination, urinalysis and urine culture, renal and pelvic ultrasound, a 3-day voiding diary, and the overactive bladder questionnaire short form. Outcomes of these investigations were assessed 7 days before and 180 days after LSG was performed. Controls were obese individuals (60 men and 60 women) from a LSG waiting list. Preliminary statistical data were used to compare sex, age, and weight distributions in the two study populations; then, the following parameters were compared before and after surgery: number of micturitions per day, urgency episodes per day, number of urgency incontinence (UUI) episodes per day, mean voided volume for micturition, liquid intake count per day, and OAB-q SF score.

Results

Symptoms of overactive bladder were common in the morbidly obese cohort, affecting more women than men. Compared with untreated patients, patients treated with LSG had significantly reduced body mass index 180 days postoperatively; this outcome was associated with improvement in overactive bladder symptoms, whereas no change occurred in untreated controls. Regarding lower urinary tract symptoms, in treated patients the OAB-q SF score significantly improved (showing a significant reduction in total score), and a statistically significant improvement in voiding diary parameters was observed. All of the patients in our cohort who had obesity and OAB also had diabetes; therefore, the correlation between OAB-q SF scores and HbA1c value was investigated. However, Pearson's analysis showed no correlation between the OAB-q SF scores and HbA1c measurements at baseline in morbidly obese individuals .

Discussions

Central obesity, as measured by waist circumference, may predict LUTS severity, and severe obesity is associated with increased risk of urinary disorders. Therefore, reducing obesity might be an important target for the prevention of and intervention for LUTS. Despite the evidence that bladder irritation is common in morbidly obese patients, no studies have explored OAB syndrome or evaluated if it improves after bariatric surgery. Therefore, we decided to investigate this topic in our study. We found that OAB syndrome is common in obese individuals. The exclusion criteria were selected to minimize the influence of potential urologic, neurologic, and iatrogenic causes of OAB. OAB-q SF scores were consistent with data obtained by the three-day voiding diary and support the reliability of the results at baseline and follow-up, proving the correlation between obesity and OAB. The specific mechanism underlying the effect of obesity on OAB pathogenesis has not been yet described. Previous studies indicate that poor lifestyle factors are causally linked to diabetes and obesity, and may contribute to the onset of OAB. In particular, low physical activity appears to be an important modifiable causal factor for OAB, operating directly as well as indirectly via pathways involving obesity or diabetes.This result has been strongly supported by the evidence of a direct association between diabetes and OAB, which has been reported in a recent investigation using the OAB-q SF and voiding diary in type II diabetic individuals. Other investigations showed that obesity and concurrent type 2 diabetes mellitus lower urinary tract fibrosis and are inextricably and biologically linked to urinary voiding dysfunction. However, the effect of irritation on obesity can be postulated based on the assumption that fat in the pelvis reduces bladder expansion and thus increases urinary frequency and determines low mean urinary volumes for micturition, as showed by voiding diaries in our study. Therefore, if all these observations support the hypothesis of both indirect and direct correlation between obesity and OAB, a significant improvement in OAB symptoms should be expected after BMI reduction provided by bariatric surgery, as observed in our investigation.

Conclusion

In morbidly obese patients, the onset of OAB symptoms may have a complicated pathophysiology involving endocrine, dysmetabolic, respiratory, and cardiovascular factors of variable distribution, but very often expressed contemporarily in these patients. Therefore, as already shown for other comorbidities associated with obesity, the best method to overcome OAB symptoms in morbidly obese individuals is to restore normal BMI, thus reducing all contributing factors leading to OAB onset. In our pilot investigation, in fact, OAB symptoms resulted well represented in morbidly obese patients, with a moderate prevalence in women and the significant decrease in BMI at the 6- month follow-up after LSG results in amelioration of OAB symptoms.

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Lunedì 25 maggio

Sala A

08:00 -09:30

Comunicazioni 3

MRI e biopsie

Moderatori:
Carlo Introini
M. Prencipe

Interventi: L. Diclemente
Focus on:
Carlo Introini
Nuovi standards nella biopsia prostatica

1. Magnetic Resonance Imaging/Ultrasound Fusion Guided Prostate Biopsy: Preliminary Experiences

C. Dattilo[1], M. Mencarini[1], M. Spurio[1], F.G. Di Loro[1], A. Macchiarella[1], F. Rubino[1], F. Blefari[1]
[1] Ospedale Santo Stefano (Prato)

Objective
It's known that the TRUS has a low sensitivity and specificity in identifying cancerous prostate lesions. In contrast, in many years of testing, multiparametric MRI has proved extremely effective in the diagnostic and treatment of prostate cancer but it is difficult to use as a guide to the biopsy. The stereotactic transperineal prostate biopsy is a new technique that combines MRI images with real time imaging by TRUS to identify and mapping prostate lesions suspicious for malignancy. This method allows to exploit the advantages of each method by increasing the precision of the samples targeted and allowing you to store data and images of the procedure so that it is repeatable and can be used in the follow-up in case of active surveillance. It also allows any executions of focal therapies: HIFU, cryotherapy and brachytherapy. The aim of the study is to detect the cancer detection rate of prostate stereotactic trans perineal biopsy, compare the specificity of MR images with the ultrasound, highlight the differences in histological outcomes in targeted sampling with image fusion with eco guided mapping of patient with biochemical suspicion of neoplasia clinically negative.

Materials and Methods
Between December 2014 and February 2015 we underwent prostatic stereotactic trans perineal biopsy 10 patients with biochemical suspect of prostate cancer (mean age 60.4 years, range 46-74, mean PSA 7.6 range from 4.2 to 11.7 average prostate volume 71 ml range 40-110 ml). All patients had previously undergone TRUS guided biopsy (9 pcs 1 mapping, 1 pc 2 mapping). Before sampling was performed a multiparametric MRI 1.5T with T2-weighted imaging, diffusion and with contrast medium. The images were processed with software Watson to identify suspicious areas for ETP and then subsequently superimposed on the TRUS images captured in real time during the mapping. The drawings were made by trans perineal sampling with needles 18G using a perforated screen for pointing and needle guide. The software in the course of image overlay indicates the hole in which it must be inserted the needle. The procedure was performed in the lithotomy position and spinal anesthesia and required use of the operating room for about 70 minutes per patient. The preparation has provided antibiotics (levofloxacin 1 pill the night before) and evacuative fleet the night before and the same morning. For each patient were performed an average of 24.1 samples (range 24-33).

Results
In all patients MRI revealed suspected areas where to point specimens. 7 biopsies were positive for prostate Ca (70%). In patients with adenocarcinoma, 85% of the cores taken in suspect areas were positive. 3 adenocarcinomas had a Gleason score (GS) 4 + 4, 2 adenocarcinomas GS 4 + 3, 1 adenocarcinoma GS 3 + 4, 1 adenocarcinoma GS 3 + 3. 2 patients (20%) had urinary retention that required placement of a bladder catheter removed after 5 days with resumption of spontaneous voiding. 3 patients (30%) had hematuria resolved spontaneously within 2 days. No cases of UTI or pelvic-perineal hematoma. All patients reported hemospermia.

Discussions
In our experience, this technique showed to be better in detection of prostate cancer (70% positive) than mapping performed with use of ultrasound alone (in a series of 1275 patients since 2008 we had 34, 5% of detection rate for cancer in 440 cases). Furthermore this series of Patients consist in a second look for cancer in a previous negative mapping.
We need to define the inclusion criteria to select patients for the method. Multiparametric MRI showed a sensitivity and a specificity better than transrectal ultrasounds for the detection of prostate cancer. Should it be performed in all patients with negative DRE and rising PSA? Stereotactic trans perineal biopsy has to be reserved exclusively for the re-mapping? Which patients will benefit from early diagnosis in terms of survival and quality of life?

Conclusion
The method has proven effective in the diagnosis of prostatic adenocarcinoma in patients with suspected RM. At the moment the need for specific equipment and hospitalization of the patient to perform the mapping in anesthesia with the related costs, impose a limited use of the technique. This platform can also be used in the emerging field of focal prostate therapy, is to guide treatment and for the follow-up of treated lesions, or to conduct active surveillance.
At the time the limit of the technique is the inability to detect lesions <3 mm and the execution of MRI in patients with prosthetic not compatible with MRI or pacemakers and cardiac defibrillators.

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2. 3D US Versus US/MRI Fusion-Guided Target Biopsy To Detect Prostate Cancer: A Preliminary Experience

M. Ferriero[1], G. Simone[1], R. Papalia[2], S. Guaglianone[1], M. Gallucci[1]
[1] Istituto Nazionale Tumori "Regina Elena", U.O. Urologia (Roma)
[2] Università Campus Bio-Medico, Unità di Urologia (Roma)

Introduction And Objectives:
Recent developments in US systems and imaging modalities such as multiparametric MRI have led to a promising advance in mapping and correctly tracking target regions. We compared detection rate of 3D US versus US/MRI fusion-guided prostate biopsy in two groups of patients at their initial biopsy.

Methods:
From December 2013 to October 2014 we prospectively analyzed data of 51 consecutive patients with no previous history of prostate cancer who underwent an initial prostate biopsy due to an abnormal PSA and/or DRE, using respectively 3D-US and 3D-US/MRI fusion guided system. All the biopsies were done by a single experienced operator using the same standardized protocol of transrectal random systematic saturation biopsy and three target cores of each suspicious area in the US/MRI fusion-guided biopsy group. All procedures were performed using Urostation (Koelis, Grenoble, France).

Results:
The two groups were comparable for age, total PSA, DRE and prostate volume. Cancer detection rate was high in both groups but significantly higher in the group for US/MRI fusion guided biopsy 74.2% vs 50% (p=0.006)[Table 1]. A between group comparison high-lighted a statistically significant and a trend towards significance in detecting clinically nonsignificant and clinically significant prostate cancer (p=0.005 and p=0.08, respectively) [Table2]. In a post-hoc analysis performed on patients with a positive fusion biopsy, prostate cancer detection rate of systematic cores and target cores were 78.2 % (18/23) and 91.3% (21/23), respectively (p=0.001).

Conclusions:
This preliminary experience showed a reasonable evidence demonstrating the superiority of the 3D US/MRI fusion guided biopsies in detecting prostate cancers that would have been missed using the 3D saturation protocol.

3. 2D-Us Versus 3D-Us Guided Saturation Biopsy To Detect Prostate Cancer

M. Ferriero[1], G.. Simone[1], R. Papalia[2], R. Mastroianni[2], S. Guaglianone[1], M. Gallucci[1]
[1] Istituto Nazionale Tumori "Regina Elena", U.O. Urologia (Roma)
[2] Università Campus Bio-Medico, Unità di Urologia (Roma)

Introduction And Objectives:
Grey scale (GS) two dimension (2D) transrectal ultrasound- (TRUS-) guided systematic prostate biopsy is the clinical standard for prostate cancer diagnosis. In the last years, the GS three dimension (3D) TRUS-guided sampling has been introduced as a new technique that improves prostate mapping as well as clinical quality management. We compared detection rate of 2D-US versus 3D-US guided saturation biopsy in two groups of patients at their initial biopsy.

Methods:
From December 2012 to October 2014 we prospectively analyzed data of 84 consecutive patients with no previous history of prostate cancer who underwent an initial prostate biopsy due to an abnormal PSA and/or DRE, using respectively 2D-US and 3D-US guided system. All biopsies were done by a single experienced operator using the same
standardized protocol of transrectal random systematic saturation biopsy. All 3D procedures were performed using an end firing, 3D TRUS probe and a Sonoace X8 ultrasound machine (with Koelis Urostation) capable of 3D image acquisition allowing real-time 3D TRUS registration system to spatially map each biopsy needle trajectory (Organ Based Tracking).

Results:
The two groups were comparable for age, total PSA, DRE and prostate volume. Cancer detection rate was high in both groups but significantly higher in the group of 3D-US guided biopsy, 50% vs 45% respectively (p=0.001)[Table 1]. A between group comparison highlighted a statistically significant difference in detecting higher rate of cores involved and clinically relevant prostate cancer using the 3D-US system (p=0.004 and p=0.002, respectively) [Table 2].

Conclusions:
This experience showed the superiority of 3D-US guided biopsy in detecting prostate cancers that would have been missed using the 2D-US guided saturation protocol.

4. Diagnostic Performance Of Multiparametric MRI In Prostate Cancer: Per Core Analysis Of Two Prospective Ultrasound/MRIFusion Biopsy Datasets

G. Simone[1], A. Giacobbe[2], D. Collura[2], R. Papalia[3], S. Guaglianone[4], G.L. Muto[5], M. Gallucci[4], G. Muto[6], M. Ferriero[4]
[1] Ospedale San Giovanni Bosco, Istituto Nazionale Tumori "Regina Elena" (Torino, Roma)
[2] Ospedale San Giovanni Bosco, (Torino)
[3] Istituto Nazionale Tumori "Regina Elena", Università Campus Biomedico (Roma)
[4] Istituto Nazionale Tumori "Regina Elena" (Roma)
[5] Università Campus Biomedico (Roma)
[6] Ospedale San Giovanni Bosco, Università Campus Biomedico (Torino, Roma)

Introduction & Objectives:
The fusion of multiparametric (Mp) magnetic resonance imaging (MRI) with real time ultrasound during prostate biopsy is gaining popularity among urologists. We evaluated the diagnostic performance of Mp-MRI using a per-core analysis of patients who underwent prostate "fusion" biopsy.

Material & Methods:
Baseline, clinical and pathological data of 76 consecutive patients who underwent "fusion" prostate biopsy were prospectively collected in two centres between October 2013 and September 2014. Diagnostic accuracy of Mp-MRI was evaluated in the whole cohort and in those patients with Gleason score >6, separately. Sensitivity (Se), specificity (Sp), positive predictive value (PPV), negative predictive value (NPV) and accuracy (Ac) of Mp-MRI were assessed on the base of a per core analysis of histologic findings.

Results:
The 2 series were not homogeneous for number of suspicious foci at Mp-MRI (p<0.001), number of cores taken (p<0.001) and number of targeted cores taken (p<0.001) (Table 1). Out of 76 patients, 47 had a PCa diagnosis (61.8%); 28 of them (59.5%) were Gleason score 6. Overall, 1691 cores were taken: Se, Sp, PPV, NPV and Ac of Mp-MRI in the whole cohort were 41.7%, 86.5%, 33.1%, 85.4% and 72.9%, respectively. When restricting the analysis to Gleason scores >6, Se, Sp, PPV, NPV and Ac were 33.5%, 82.2%, 16.2%, 92.3% and 77.7%, respectively. The PPV of PI-RADS scores 3,4 and 5 were 28.5%, 65.8% and 90%, respectively, while the PPV of PI-RADS scores for Gleason score PCa >6 were 7.1%, 18.4% and 60%, respectively.

Conclusions:
This study confirmed high PCa detection rates with Mp-MRI-ultrasound fusion biopsy. Nevertheless, a meticulous analysis of 1691 biopsy cores taken has highlighted a poor sensitivity and PPV of Mp-MRI, especially for Gleason score>6 PCa foci. PIRADS scores 5 correctly identified PCa lesions with Gleason scores>6.

5. A Comparison Between Multiparametric MRI And PHI In The Prediction Of Prostate Cancer After An Initial Negative Biopsy

A.. Fandella[1], S. Guazzieri[1]
[1] Casa di Cura Giovanni XXIII (Monastier di Treviso)

Objective

The Prostate Health Index (phi) is a new test combining total, free and [-2]proPSA into a single score. It was recently approved by the FDA and is now commercially available in the U.S., Europe and Australia. We investigate whether phi improves specificity for detecting clinically significant prostate cancer and can help reduce prostate cancer over diagnosis. Prostate Health Index (PHI) and prostate multiparametric Magnetic Resonance Imaging (mp-MRI) have been proposed for reducing the number of unnecessary repeated biopsies (RB) in patients with a negative prostate biopsy (PB) and persistent suspicion of prostate cancer (PCa). We conducted this study to evaluate the diagnostic accuracy of PHI, and mp-MRI, and different combinations of these tests in the RB setting.

Materials and Methods

79 patients with an initial negative prostate biopsy and persistent suspicion of PCa were enrolled in this prospective study. The patients underwent serum measurements of the total PSA and free PSA rate, along with PHI, and mp-MRI (receiver operating characteristics (ROC) curve for ADC values, choline (Cho)/citrate (Cit) and Cho+creatine (Cre)/Cit ratios for each observer) prior to standard (12- core) RB that was performed by urologists blinded to the mp-MRI results. Multivariable logistic regression models with different combinations of PHI, and mp-MRI were used to identify the predictors of PCa with RB, and the performances of these models were compared using ROC curves, AUC analysis, and decision curve analysis (DCA).

Results

The Prostate Health Index was significantly higher in men with Gleason 7 or greater and "Epstein significant" cancer. For mp-MRI sensitivity declined to 31% and specificity to 75% for the T1W sequence, sensitivity declined to 43% and specificity to 67% for the DCE T1W sequence, sensitivity declined to 46% and specificity to 68% for the T2W sequence, sensitivity declined to 29% and specificity to 82% for the DWI-ADC mapping; and specificity was 49% for the Cho/Cit and Cho+Cre/Cit ratios, sensitivity was 69% for the Cho/Cit ratio, and sensitivity was 70% for the Cho+Cre/Cit ratio for H-MRS. The T2W sequence and H-MRS presented significant statistical differences for the depiction of prostatic cancer ($P < 0.05$), the most efficient sequence to detect prostatic cancer was H-MRS: Cho+Cre/Cit and Cho/Cit ratios. In the ROC analysis, the most significant contribution was provided by mp-MRI (AUC value of 0.936), which was greater than the contribution of the PHI model ($p<0.001$). In the multivariate logistic regression analysis, only mp-MRI was a significant independent predictor of PCa diagnosis with RB ($p<0.001$). The results of the DCA confirmed that the most significant improvement in the net benefit was provided by mp-MRI

Discussions

It is well known that precise diagnosis faces real limitations with digital rectal examination, serum PSA, diagnostic imaging, and PBx . Over the past decades, the use of serum PSA has significantly improved the clinical management of PCa and decreased PCa-specific mortality despite its unsatisfactory specificity and sensitivity. As the novel markers, PHI and %p2PSA have been suggested the most cancer-specific serum biomarkers in men with PCa in comparison with other currently available test (tPSA, fPSA and %fPSA), especially in patients with PSA < 10 ng/ml. MRI has already been established as a noninvasive diagnostic tool . However, the ideal MRI sequence modality combination has yet to be established. In our study, DWI had the highest specificity, PPV, NPV, and AUC to detect the presence or absence of PCa in intraprostatic segmental regions . We could obtain similar analytical results only in Pz regions. It was reported that DWI provides an important quantitative biophysical parameter that can be used to differentiate benign from malignant prostate tissue . In the European Society of Urogenital Radiology (ESUR) prostate MR guidelines (2012) , DWI is noted to be a powerful clinical tool, as it allows apparent diffusion coefficient (ADC) maps to be calculated, enabling qualitative and quantitative assessment of PCa aggressiveness. Even though we did not use an ADC map in this study, DWI had the best outcome among the MRI modalities.

Conclusion

PHI test outperforms its individual components of total, free and [-2]proPSA for the identification of clinically significant prostate cancer. Phi may be useful as part of a multivariable approach to reduce prostate biopsies and over diagnosis.
Growing body of evidence suggested that %p2PSA and PHI are more accurate in distinguishing indolent PCa from more aggressive diseases. However, the limitations of those studies must be noticed. First, the recommended cut-off point of these indexes among those studies varied widely . So far, the standard thresholds of PHI and %p2PSA to identify PCa and aggressive disease have not been set up. Our results indicate that mp-MRI has high diagnostic accuracy in identifying patients with PCa in the RB setting compared with PHI. For this reason, mp-MRI should be considered as a valid tool for avoiding unnecessary biopsies in this clinical scenario.

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6. Methylation Pattern Analysis In Prostate Cancer As A New Potential Diagnostic Approach

R. Gunelli[1], M. Fiori[1], T. Zenico[1], G. Gurioli[2], S. Salvi[2], F. Martignano[2], F. Foca[3], M. Costantini[4], U. Salomone[1], C. Salaris[1], D. Calistri[2], V. Casadio[2]
[1] Ospedale Morgagni Pierantoni, Divisione di Urologia (Forlì)
[2] Laboratorio di Bioscienze, Istituto Scientifico Romagnolo per lo Studio e la Cura dei Tumori (IRST) IRCCS (Meldola)
[3] Unità di Biostatistica e Studi Clinici, Istituto Scientifico Romagnolo per lo Studio e la Cura dei Tumori (IRST) IRCCS (Meldola)
[4] Ospedale Morgagni Pierantoni, Divisione di Patologia (Forlì)

Objective

Epigenetic modifications, such as DNA methylation in CpG islands, are correlated to cancer development suggesting that these events could be early phenomena (1). For this reason, DNA methylation could be a potential biomarker for prostate cancer early diagnosis. Moreover, every tumor type has a specific methylation pattern and, when compared with healthy tissues, it could be useful for the diagnosis, prognosis and treatment of the disease (2). Characterizing aberrant DNA methylation changes associated with prostate carcinogenesis may identify a tumor-specific methylation pattern useful for prostate cancer early diagnosis (3).

Materials and Methods

The objective of the study was to assess the methylation status of 40 tumor suppressor genes using methylation specific-multiplex ligation probe amplification (MS-MLPA) assay and we used MSP as a confirmatory methodology to analyze the methylation status of the 5 genes resulted methylated with statistical significance: GSTP1, RARB, RASSF1A, SCGB3A1 and CCND2 (4,5). We analyzed two sets of paraffin-embedded tissues. In the training set 89 samples were collected distinguished in: 40 prostate cancer tissues, 26 healthy prostatic tissues adjacent to the tumor and 23 healthy non prostatic tissues, such as seminal vesicles and vesical neck. In the validation set 40 prostate cancer tissues and their healthy prostate tissues adjacent to the tumor were collected. Hierarchical cluster analysis (Ward method) was performed to determine a methylation pattern.

Results

In training set, the hierarchical cluster analysis identified highly methylated genes (GSTP1, RARB, RASSF1, SCGB3A1, CCND2, APC, ID4) in tumor samples respect to other tissues. In the same way, the validation set cluster analysis confirmed the same genes with different methylation status. In particular, five genes (GSTP1, RARB, RASSF1, SCGB3A1, CCND2) were significantly different methylated between the tissues ($p < 0.001$). These genes had area under ROC curve varying from 0.89 to 0.95 and diagnostic accuracy from 80% to 90%. Correlation analyses between methylation status of the 40 tumor suppressor genes and clinical-pathological features such as Gleason score, tumor size, PSA levels and age at diagnosis were performed but none of the genes analyzed was significantly correlated with clinical-pathological features.

Discussions

The current need is to find which patients with suspected PCa and an initial negative biopsy have to be selected for further biopsy. A MS-MLPA approach was adopted to find out a panel of tumor suppressor genes able to distinguish prostate cancer tissues from healthy ones (4, 5, 6). We observed that 5 genes (GSTP1, RARB, RASSF1, SCGB3A1 and CCND2) were highly specific for statistically discriminating prostate cancer tissues from healthy prostatic tissues adjacent to the tumor and to date SCGB3A1 and CCND2, that in our study had a statistically higher methylation, were not hypothesized as potential biomarkers in early diagnosis of prostate cancer (7). These findings suggest that maybe an early methylation phenomenon occurs in healthy prostate tissue inducing a consequent cancer transformation and, as suggested by some recently published studies (8, 9), it could be important to identify prostate cancer among negative core biopsies, thus avoiding unnecessary repeat biopsies.

Conclusion

In our study the methylation status of GSTP1, RARB, RASSF1, SCGB3A1, CCND2 genes was highly specific for statistically discriminating prostate cancer tissues from healthy prostate tissues adjacent to the tumor, in particular SCGB3A1 and CCND2 are novel potential biomarkers in early diagnosis prostate cancer and useful avoiding unnecessary repeat biopsies.

The main limitations of our study are the modest case series and the data found in tissue but our preliminary results regarding the use of methylation status of several genes as biomarkers for early diagnosis are encouraging and we are aware of the need to continue the study with the research performed on biological fluids (10, 11, 12).

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7. Nomogram For Gleason Sum Upgrading Risk After Radical Prostatectomy In Patients With Biopsy Gleason Score 6 Or 7

L. Benecchi[1], M. Potenzoni[2], S. Corti[1], F. Russo[1], F. Echeverria[1], C. Del Boca[1]

[1] Ospedale Civile (Cremona)

[2] Ospedale di Fidenza (Parma)

Objective

In the era of prostate specific antigen (PSA) screening, more and more patients are primarily diagnosed with insignificant prostate cancer. Since most of these cancers will not become clinically symptomatic, deferred treatment modalities have been introduced to offer similar therapeutic effects while preserving sexual function and continence.3 The criteria to define those patients who are suitable to enter conservative treatment protocols are mainly based on PSA, clinical stage, and tumour grade.

The Gleason grade is the only factor that is not influenced by other pathological entities and consequently represents the most powerful and reliable predictor. In patients with low and intermediate grade prostate cancer on biopsy, inaccurate cancer grading can lead to a false sense of comfort for both physician and patient, and lead to under-treatment of intermediate and high-risk cases. The objective of

this study was to build a nomogram for prediction of Gleason Sum Upgrading in biopsy Gleason score 6 or 7.

Materials and Methods

Patients undergoing radical prostatectomy with matched diagnostic biopsies were identified from a prospectively recorded database. Prostate specimens were processed according to the Stanford protocol, and biopsies and specimens were graded according to the Gleason system as initially reported by Gleason. Pretreatment prostate specific antigen was measured before digital rectal examination (DRE) and transrectal ultrasound (TRUS).The prostate specific antigen level, percent free PSA, prostate volume, number of positive cores, biopsy Gleason score, clinical T stage and age were used in a multivariate logistic regression model for addressing the probability of Gleason Sum Upgrading. The developed nomogram was internally validated.
Statistical tests were carried out using R Software.

Results

In total, 266 patients met our inclusion criteria and entered our analysis. The median patient age was 69 years (range 47-78 yerars), median PSA was 6.56 ng/mL (range 2.1 – 91), median Prostate Volume was 38 (range 9 – 130cc). Of them, 83 (31.2%) were upgraded to higher Gleason sum on final pathology. By using 6 readily available variables (prostate-specific antigen level, percent freePSA, prostate Volume, number of positive cores, biopsy Gleason score and clinical T stage), our nomogram showed a bootstrap corrected concordance index of 0.78 and good calibration. The nomogram also demonstrated satisfied statistical performance for predicting significant Gleason Sum Upgrading.

Discussions

Gleason score is one of the strongest predictors of outcome following conservative management or active treatment of localized prostate cancer, and as such its accurate determination at the time of diagnosis is critical to the optimal management of patients with the disease. Although pathologist error and borderline cases may contribute to Gleason score discordance in a small number of cases, most authors believe that sampling error is the most common cause of Gleason score under-grading. During a diagnostic biopsy, only a very small amount of the total prostate tissue is sampled for histological analysis, and given the heterogeneous and multifocal nature of prostate cancer it is easy to envisage how smaller volumes of higher grade elements may be missed leading to under-grading or, less commonly, how larger volumes of lower grade elements may be missed leading to over-grading (reverse sampling error). Because the differences between different Gleason patterns are a continuum, there are borderline grades between small glands of pattern 3 and poorly formed glands of pattern 4. Similarly, there are borderline grades between poorly formed glands of pattern 4 and pattern 5 with barely appreciable glandular differentiation.

Conclusion

Gleason Sum Upgrading can affects patients undergoing radical prostatectomy. To address the paucity of information regarding Gleason Sum Upgrading rates in patients with low and intermediate Gleason score, we examined the rate of Gleason Sum Upgrading in our patients and found that 31% of such men will harbor cancer upgrading at final pathology when undergoing radical prostatectomy. We have confirmed that sampling error at transrectal ultrasound biopsy (TRUSBx) is a significant cause of Gleason score under-grading at the time of initial diagnosis, A new nomogram to predict Gleason Sum Upgrading in clinically diagnosed prostate cancer was developed and demonstrated good statistical performance in internal validation.

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8. Are Early Continence Recovery And Oncological Outcomes Influenced By Use Of Different Devices In Prostatic Apex Dissection During Laparoscopic Radical Prostatectomy?

L. Silvestri[1], A.L. Pastore[1], G. Palleschi[1], A. Leto[1], Y. Al salhi[1], A. Ripoli[1], A. Carbone[1]

[1] Università "La Sapienza" di Roma, Facoltà di Farmacia e Medicina, Dipartimento di Scienze e Biotecnologie Medico-Chirurgiche, U.O.C. Urologia (Latina)

Objective

Treatment of prostate cancer has evolved considerably in the last decade, especially in terms of minimisation of the negative impacts on erectile function and continence to ensure good quality of life for treated patients. New surgical devices, such as dissectors and haemostatic scalpels, allow precise definition of the surgical field with finer dissection of the anatomic structures, with subsequent reductions in operative times and better oncological and functional outcomes. Although monopolar scissors (MS) are still widely used, radiofrequency (RF) and ultrasound (US) scalpels have been recently introduced in laparoscopic radical prostatectomy (LRP). However, despite the widespread use of these scalpels, few studies have compared these devices in terms of oncological and functional outcomes after radical prostatectomy. The present study aimed to prospectively assess the impact of MS, RF and US scalpels on margin status at apex, and recovery of urinary continence and erectile function in patients undergoing extraperitoneal LRP.

Materials and Methods

A total of 150 men were prospectively enrolled. All patients had a histopathologic diagnosis of prostatic adenocarcinoma, as determined by transperineal ultrasound-guided biopsy after preliminary clinical evaluation involving digital rectal examination (DRE) and assessment of serum prostate-specific antigen (PSA) levels (total PSA, free-PSA, and ratio). The clinical stage of the disease was determined in all patients by abdominopelvic magnetic resonance and whole-body bone scintigraphy.
All patients who met the following preoperative criteria underwent bilateral nerve sparing ELRP: PSA ≤10 ng/mL, life expectancy >10 years, no extraprostatic extension, negative DRE, no more than 2 positive cores per lobe, and a primary Gleason pattern = 3. Postoperative (90 and 180 days post-ELRP) evaluation of continence was performed for all patients using the International Consultation on Incontinence self-administered Questionnaire – Urinary Incontinence Short Form (ICIQ-UI SF), a condition-specific, quality of life questionnaire developed by the International Continence Society (ICS) for patients with urinary

incontinence. After a stratified randomization to control for baseline covariates was made, the patients were randomly assigned, using a computer table generation of random numbers, to group A (RF; n = 50), group B (US; n = 50), or group C (MS; n = 50). In group A, the dissection of the prostatic apex was performed with the use of an RF scalpel (LigaSure-8 generator with LigaSure RF scalpel, vessel-sealing system V 5-mm forceps; Valley Lab, Tyco Healthcare®). In group B, the dissection was performed with the use of a US scalpel (UltraCision Harmonic scalpel generator 300 with 5-mm 36p Harmonic Ace forceps; Ethicon Endo-Surgery, Inc.®), and in group C, the dissection was performed using monopolar scissors (Aesculap, Inc.®). All patients were clinically evaluated 15 and 30 days post-surgery.

Results

Patient age, prostate-specific antigen levels, clinical stage, body mass index (BMI), baseline urinary function, and perioperative data were similar in all groups. Focusing on the intraoperative data, there were no differences regarding the operative times (mean: 155.8 ± 29.3 min; range: 108-202 min) and blood loss (mean 184.6 ± 25.6 mL; range: 157-223 mL) between the groups (p = 0.9433). Similarly to the overall surgical margin positivity, there were no significant differences between the groups in terms of apical margin positivity, with 3, 1, and 1 patients in groups A, B, and C, respectively, reporting positive apical margins (p = 0.4424). The mean number of days of catheterization was 6.69, 8.25, and 8.86 days in groups A, B, and C, respectively. Moreover, no differences regarding the functional outcomes evaluated by the ICIQ scores at 1, 3, and 6 months post-surgery were observed. At the 3-month follow-up, the median ICIQ scores were 6, 6.57, and 5.36 in groups A, B, and C, respectively (p = 0.7456), whereas at the 6-month follow-up, they were 3.38, 5.14, and 2.73, respectively (p = 0.1782).

Discussions

The precise aetiology of post-prostatectomy incontinence remains unknown. The reported incidence rates of urinary incontinence after radical prostatectomy range from 2.5-87.0%, and differ considerably according to the exact definition, follow-up duration, and surgical technique used. There are many known causative factors for the occurrence of post-prostatectomy incontinence, with a number of objective clinical characteristics, the surgical technique used, and the absence or presence of postoperative pelvic floor muscle therapy being the most important ones. In the present study, we demonstrated that the use of RF, US, and cold scissors were similar with respect to operative time, blood loss, and postoperative hospital stay, while a shorter catheterization time was noted in the RF group. Moreover, blood transfusions are rarely required, with only 11/150 patients needing blood transfusions in this study. In addition, in our case series, recovery of continence was reported by 71.7% of patients 3 months postoperatively, reaching 94.7% at the 6-month follow-up. To the best of our knowledge, the present study is the first prospective randomized study focusing on the laparoscopic radical prostatectomy functional outcomes (i.e. early continence recovery) related to the use of different devices during apex dissection and urethral stump preparation.

Most surgeons choose the surgical device based on practical aspects, particularly their confidence with the instrument, its ergonomic features, and, consequently, its simplicity of use. Ideally, the preference of one device over another should firstly depend on technical aspects and objective data. The LigaSure and UltraCision devices used herein present different technical features. The LigaSure vessel-sealing device uses both electrical energy and pressure to liquefy and reform collagen and elastin in the vessel walls and tissues (up to 7 mm in diameter) to provide haemostasis. The device incorporates feedback control, which automatically terminates energy transmission once a seal has been achieved. In contrast, the UltraCision scalpel uses US technology to denature proteins within vessel walls and tissues (up to 5 mm thick), leading to coagulation. Both the LigaSure device and UltraCision scalpel have been demonstrated to be safe and effective in numerous studies, and both devices have been shown to reduce operative times and make the procedure easier for the surgeon.

Conclusion

Oncological, functional, and operative outcomes are similar between monopolar scissors and radiofrequency and ultrasound scalpels during LRP, with no device demonstrating superiority in terms of continence recovery. In the present study, we demonstrated that the use of RF, US, and cold scissors were similar with respect to operative time, blood loss, and postoperative hospital stay. In our case series, recovery of continence was reported by 71.7% of patients 3 months postoperatively, reaching 94.7% at the 6-month follow-up. This is the first study in the literature focusing on continence recovery with respect to different scalpels used in LRP, and our findings confirm the efficacy and safety of these devices.

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9. Trans Douglas Robotic Radical Prostatectomy: Our Experience

Y. Al Shali[1], L. Topazio[1], D. Autieri[1], S. Khorrami[1], T. Verdacchi[1], M. De Angelis[1], F. Annino[1]

[1] Ospedale San Donato A.U.S.L. 8 - U.O.C. Urologia (Arezzo)

Objective

Aim of the present study is to report our 3 years experience (December 2011 – July 2014) and results of Trans Douglas Robotic Radical Prostatectomy (1).

Materials and Methods

Fortyfive males underwent robotic radical prostatectomy during a 32 months study period. The surgical approach was that described by Bocciardi et al in 2010 with a trans-douglas approach and preservation of the anterior compartment wich contains all of the structures thought to play a role in maintenance of continence and potency. Mean patient age was 64.84 yr (IQR:52-74 yr). Mean Psa was 7.47 ng/ml (IQR:4.6-13.5 ng/ml). Gleason score at biopsy was 6 (3+3) in 26 patients, 7(3+4) in 12 patients, 8(4+4) in 3 patients, 10(5+5) in 2 patients and Gleason 3 in 1 patient. Mean volume prostate was 50.1 g (IQR:26-108). Mean preoperative EHS was 3.04.

Results

Mean operative time was 172.44 minutes (IQR:105-265 minutes), mean hospital stay was 2.3 days (IQR: 2-3 days). No perioperative complications were found and only 1 (2.2%) patient was rehospitalized due to fever. No transfusion was needed in any patient. 39 (86.6%) nerve sparing techniques were performed (of which 2 monolateral) while the extrafascial approach was performed in 6 cases (13.3%). 11 (24%) patients underwent a bilateral iliac-obturatory lymphadenectomy. Histological examination reported in our population the presence of 25 (55.5%) pT2 and 20 (44.5%) pT3. Pathologic Gleason score confirmed the previous one in 29 (64.4%) cases, showed a higher grade in 10 (22.2%) cases, while a lower grade was found in 6 (13.3%) cases. Positive surgical margins were found in 45% of pT3 population and in 16% of pT2 population. Mean PSA nadir (two months after surgery) was 0.07 ng/ml (IQR: 0,001-1,7) with one biochemical relapse in a patient with lymph node recurrence. Regarding functional outcomes 24 (63.1%) had immediate continence (defined as the no need of pad), 34 (75.5%) at one month and 38 (84.5%) at three months. 7 patients (15.5%) had still incontinence of which 2 patients wear 2 pads daily and 5 wear 1 pad daily. Regarding sexual functional outcomes, data of 29 patients that described a preoperative EHS of 3-4/4 who underwent a nerve sparing approach showed that 15 patients (51%) described an EHS of 3-4/4 with a mean recovery time of 47.8 days.

Discussions

Trans Douglas approach for RALP is because of anatomic considerations and greater respect for the structures involved in the mechanisms of potency and continence. This new approach presents several theoretical advantages over the traditional technique. First, it allows for the possibility of performing not just completely intrafascial prostatectomies, as Bocciardi explained, but

also for interfascial and extrafascial ones. Our study has a main limitation linked to the nonrandomized and noncomparative design, but it represents a natural step during the development of a new surgical technique. Furthermore is carachterized by a heterogenous population that shows the presence of pT3 in almost half of patients.

Conclusion

Our impression is that Trans Douglas Robotic Prostatectomy is feasible and reproducible. As regards functional outcomes our data suggest that this technique is oncologically safe and, thanks to the preservation of the anterior compartment wich contains all of the structures thought to play a role in maintenance of continence and potency, results in high early continence and potency rates. The anatomic rationale for better results of Trans-Douglas Robotic Prostatectomy compared with traditional RALP is strong however long-term, prospective, comparative, and possibly randomized studies are needed to produce stong evidence and to make this technique an alternative to standard robotic prostatectomy.

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Lunedì 25 maggio

Sala B

Moderatori:
Fulvio Colombo.
Matteo Paradiso

08:00 -09:30

Video 4

Pene d'Amore

Matteo Paradiso
Focus on: L'allungamento del pene: tra internet e realtà

1. Asportazione, Interruzione E Coagulazione Di Tutte Le Vene Peniene Tranne Quelle Crurali In Pazienti Con D.E. Da Incompetenza Venosa

O. Varriale[1], A. Maffucci[1]
[1] Ospedale dei Colli Presidio V. Monaldi, U.O.C. Urologia (Napoli)

La D.E. da fuga venosa è l'argomento più dibattuto in campo andrologico. Scopo di questa chirurgia è di ridare una normale e soddisfacente funzione sessuale ai giovani affetti da D.E. da fuga venosa e che non rispondono alla farmacoprotesi intracavernosa, agli inibitori delle fosfodiesterasi 5 e che dopo una Cavernosografia dinamica si evidenzia la fuga venosa o in corso di Doppler dinamico il flusso arterioso è di 35 ml/sec. Si asporta il sistema venoso intermedio,la vena dorsale profonda è asportata intera dal solco coronarico, dove inizia con 3 -5 rami venosi, sino al legamento sospensore.Si asportano o si distruggono tutte le circonflesse presenti nei 2/3 distali del pene e le perforanti che drenano i corpi cavernosi e si immettono nella vena dorsale profonda. I pazienti edotti della patologia e della possibilità terapeutiche optano spesso per questa chirurgia in alternativa ad alte dosi di farmaci vasoattivi ,al vacuum device e alle protesi peniene. Si lasciano integre le vene crurali e le cavernose che assicurano il drenaggio venoso, la cui asportazione sarebbe rischiosa per il paziente. I nostri risultati sono soddisfacenti. I pazienti hanno risolto la D.E.con la sola chirurgia – o con l'aggiubnta di bassi dosaggi di PDE5.

2. Allungamento E Ingrandimento Di Pene Protesizzato In Due Pazienti

O. Varriale[1], A. Maffucci[1]
[1] Ospedale dei Colli Presidio V. Monaldi, U.O.C. Urologia (Napoli)

A distanza di oltre un anno dall'impianto protesico malleabile in uno per D.E. comparsa da giovane e l'altro in età matura per diabete giovanile si è proceduto all'incremento volumetrico del pene protesizzato su richiesta dei pazienti.Con le protesi avevano frequenti e soddisfacenti rapporti con le partner ma lo sarebbero stati di più se il loro pene fosse stato più grande. In entrambi si è attuato la tecnica con incisione sovrapubica, lipectomia, interruzione legamento sospensore, scuoiamento dell'organo dagli involucri dartoici e innesto di un grosso patch esuberante di un terzo dal glande al pube. Il patch comprende derma e molto adipe adiacente. L'uretra non viene ricoperta dal patch.Sutura in parte con prolene 4/0 e con vicryl 2/0.Il patch è prelevato dall'area adiacente la spina iliaca anterior superiore. Ha la stessa elasticità della pelle peniena e scrotale. Riposizionamento degli involucri dartoici.La presenza delle protesi impedisce il riconsolidarsi del legamento sospensore. Puboplastica di allungamento. Prima dell'ingrandimento il pene era lungo 11 cm e con circonferenza di 10,5 cm,dopo era lungo 15 cm con circonferenza di 14,2 cm. La parte del pene esclusa dall'ingrandimento è il glande. L'ingrandimento è stato del 35% e dopo un anno del 22%.Siamo e sono stati soddisfatti dei risultati.

3. Recurvatum E D.E. Per I.P.P., Corporoplastica Di Allungamento, Impianto Protesi Malleabili, Incisione Delle Placche E Innesto Di Patches Di Mucosa Buccale

O. Varriale[1], A. Maffucci[1]
[1] Ospedale dei Colli Presidio V. Monaldi, U.O.C. Urologia (Napoli)

Scopo di questo intervento è di permettere ad un paziente di 56 anni di ottenere nuovamente un pene dritto e con funzione erettile ottimale. Per suoi motivi personali il paziente richiese un solo tempo chirurgico che esponeva di più al rischio di complicanze. L'intervento è complesso ma i risultati sono stati buoni. L'ideale e' eseguire questo intervento in due tempi. L'allungamento penieno è avvenuto mediante puboplastica di allungamento, lipectomia infrapubica e interruzione del legamento sospensore. La rigidità è stata ottenuta con protesi malleabili.La corporoplastica mediante doppia incisione della placca di I.P.P., previo isolamento del fascio vasculonervoso ed innesto di due patches voluminosi di mucosa buccale. Glandulopessia. Tutte le procedure chirurgiche descritte sono state eseguite attraverso un unica breccia chirurgica, sovrapubica. Il risultato finale ed il follow-up è stato buono, ma indubbiamento questo intervento sarà riproposto per casi analoghi ma in più tempi come si fa per le uretroplastiche complesse. Primo tempo: lipectomia sovra ed infrapubica, puboplastica di allungamento e corporoplastica. Secondo tempo: dopo mesi, interruzione del legamento sospensore e impianto protesico.

4. Minaccia Di Estrusione Distale Bilaterale Di Tutori Assiali Soffici Sovradimensionati In Un Caso Di IPP: Correzione Mediante Protesi Tricomponente Ri-Tunnellizzata Distalmente Su Guida Di Dati Rmn

E.. Pescatori[1], B.. Drei[1], N. Ghidini[1], P. Pisi[1]
[1] Hesperia Hospital (Modena)

Ragazzo a 18 anni sviluppava IPP post-traumatica con curvatura laterale sinistra e disfunzione erettile. Altrove: impianto di tutori soffici sovradimensionati con incisione rilasciante dell'albuginea e patch con vena safena. Successivamente: prima revisione chirurgica con accorciamento dei tutori, "apicoplastica", e rinforzo con Gore-Tex® bilateralmente. Si presentava a noi a 24 aa con dolore apicale, minaccia di estrusione laterale destra subcoronale e mediale sinistra in fossa navicolare, modica curvatura laterale sinistra. Una RMN peniena dettagliava sede e disponibilità di tessuto cavernoso residuo: nel corpo cavernoso destro medialmente alla capsula del cilindro protesico, nel corpo cavernoso sinistro dorsalmente alla capsula. Correzione chirurgica: accesso scrotale mediano con estrusione di tutore sinistro (percepito più a rischio estrusione). Incisione circumferenziale sottocoronale e degloving. Isolamento completo del fascio neurovascolare dorsale (indaginoso a sinistra). Corporotomia sinistra e re-tunnellizzazione distale, successivo accesso a capsula protesica. Corporotomia destra, rimozione tutore destro, incisione di aspetto mediale di capsula, sviluppo di piano mediale tra capsula e setto. Obliterazione di terzo distale di capsula protesica bilateralmente. Inserimento di protesi idraulica 700CXR Inhibizone per accesso scrotale.A RMN di controllo a 2 mesi f.u.: apici protesici normoposizionati. A 1 anno f.u.: paziente soddisfatto con uso regolare di protesi e obiettivamente apici protesici in sede.

5. Trattamento Chirurgico Di Angioma Cavernoso Del Pene Dell'adulto E Del Bambino

O. Varriale[1], A. Maffucci[1]
[1] Ospedale dei Colli Presidio V. Monaldi, U.O.C. Urologia (Napoli)

L'angioma cavernoso dei genitali è una patologia rara.Nel video viene trattato un uomo di 53 anni e un bambino di 10. L'angioma cavernoso è una neoformazione contenente sangue delimitato da cellule endoteliali. L'adulto accettò l'operazione per risolvere definitivamente gli episodi di ritenzione urinaria, due e per stenosi del meato uretrale esterno e per ovviare alle emorragie profuse ,verificatasi per spontanea rottura dell'angioma. Tale evenienze vengono favorite dal traumatismo sessuale e dall'invecchiamento cutaneo dei genitali. Prima dell'intervento, il paziente fu sottoposto ad eco e ad RMN del bacino. L'angioma, voluminoso e diffuso interessava scroto,glande e prepuzio,perineo, funicoli e piccolo bacino.Si asportò parte dello scroto,la parte che conteneva più angioma cavernoso. Isolamento con le forbici di tutta l'uretra glandulare dal glande e dall'interno si è asportato l'angioma. Si è resecato anche il prepuzio interessato dalla patologia.Plastica scrotale, del glande e del meato, previa spatulazione dello stesso e posizionamento di un catetere. Ottimo risultato estetico e funzionale dopo 6 giorni.Nel bambino l'asportazione dell'angioma ha uno scopo preventivo per evitare la crescita con la pubertà e per limitare il danno estetico. In oltre 30 anni abbiamo osservato 4 adulti ed un bambino. Follow-up degli adulti e del bambino che sono giunti alla nostra osservazione.

6. Correzione Di Curvatura Acquisita Dorsale Mediante Yachia Ventrale Mediana: Indicazione Cavernosometrica A Strategia Chirurgica

E.. Pescatori[1], B. Drei[1], G. Peluso[1]
[1] Hesperia Hospital (Modena)

Uomo di 49 anni con curvatura dorsale mediana di 45°, stabile da oltre 6 mesi rigidità conservata con occasionale uso di sildenafil 25 mg. Lunghezze in erezione: lato dorsale: 14 cm; lato ventrale: 16,5 cm. Il paziente richiede "allungamento di lato corto". Alla luce del dato di prevalenza del 5-53% di DE successiva a grafting senza protesi si esegue cavernometria-grafia dinamica che documenta RISERVA DI POTENZA ("entità di pressione intracavernosa che il paziente è in grado di sviluppare, in eccesso alla pressione soglia necessaria per sviluppare rigidità", Hatzichristou et al, Int J Imp Res, 2003, 15: 99-104), inadeguata a procedura di "allungamento di lato corto". Si opta pertanto per applicazione originale di tecnica di Yachia, che viene attuata sul letto del corpo spongioso uretrale. Dopo incisione circumferenziale sottocoronale e degloving si procede a isolamento del corpo spongioso dall'albuginea dei corpi cavernosi. L'incisione longitudinale mediana attuata sul lato convesso dei corpi cavernosi al punto di massima curvatura, viene suturata trasversalmente con punti staccati in PDS con nodo introflettente. Successiva ricostruzione di fascia di Buck con solidarizzazione del corpo spongioso ai corpi cavernosi. Circoncisione formale. A 3 mesi di follow-up: pene diritto di lunghezza soddisfacente, con rigidità conservata.

Lunedì 25 maggio

Sala C

08:00 -09:30

Discussione di Poster Digitali 1

Tumori della vescica

Moderatori:
Giorgio Artuso
Mauro Caponera
Rodolfo Hurle

1. Coronary Stents Medicated And Dual Antiplatelet Therapy: New Risk Factors For Bladder Cancer?

S. Marinacci[1], R. De Mitri[1], P. Cantelmo[1], A. Filoni[1]
[1] Ospedale "Vito Fazzi", U.O.C. Urologia (Lecce)

Objective
Bladder cancer accounts for about 3% of all cancers, and in urology, is second only to prostate cancer. For bladder cancer were identified the following risk factors: cigarette smoking , chronic exposure to aromatic amines and nitrosamines , any radiotherapy involving the pelvis, taking drugs such as cyclophosphamide and ifosfamide and infection .

Materials and methods
From 01/01/2014 to 31/12/2014 in our unit we observed 110 new cases of bladder cancer, including 11 (10.1%) in patients with no known risk factor, but that they had been subjected in the year previous cardiac procedure (PTCA) with stent and dual antiplatelet therapy. The drug used was : the everolimus. Our patients were divided as follows: 6 males, 4 females aged between 61 and 82 aa. These patients had undergone PTCA in a single vessel coronary stent, ischemic heart disease by dysmetabolism (hypercholesterolemia and hypertriglyceridemia), in 2013 none of these was diabetic, never smoked and no exposure to environmental risk factors for bladder cancer . urologic symptom presentation: hematuria. Cystoscopy: all cases showed a single papillary neoformation (size 1.5 to 2.5 cm), pedunculated in small planting base underwent TURBT, the histological in all patients was: pTa G1 / G2, that only forms noninfiltrating. To date none of these patients had recurrences.

Discussion
The drugs slow release of coronary stents have been used in the past as anticancer and then hypothetically acting also antiblastic. The Cardioaspirin, often associated in these patients, demonstrated in randomized trials also a protective action towards the development of bladder tumors.

Conclusions
So how to interpret this particular incidence in our series: – A mere coincidence? – A slatentizzazione neoplasia not yet expressed? The paucity of cases does not allow us to make a final judgment. Further studies are needed and larger series to clarify the doubts.

2. Are EORTC Risk Tables Usefull In Evaluating The Results Of Patients With Non-Muscle Invasive Bladder Cancer Submitted To WL TURBT? Rua's Experience

R. Giulianelli[1], L.. Albanesi[1], B.C. Gentile[1], G. Mirabile[1], G. Rizzo[1], P. Tariciotti[1], P. Alijani[1], G. Vincenti[1]
[1] Nuova Villa Claudia (Roma)

Introduction
The aim of the study was to assess the eortc risk tables usefulness in daily urological practice.

Materials and Methods.
444 pts treated for non-muscle invasive bladder cancer with wl bipolar turbt were analyzed. after performed wl turbt 6 risk factors were assessed and basing on mentioned factors and using the eortc scoring system the total score for recurrence and progression for each patient was calculated separately. according to the total score, patients were divided into 4 recurrence risk groups. patients with total recurrence score 0 were classified to group I, 1-4 points to group II, 5-9 to group III, and 10-17 to group IV risk of recurrence. During follow-up, in according to EAU guidelines for non muscle invasive bladder cancer, a wlturbt on suspected lesions or scars was carried out.

Results
23,8'%pts developed recurrent bladder tumor in 12 months of follow-up. the risk of bladder tumor recurrence was statistically higher in intermediate-risk group. the recurrence rate was 0%, 28,6%, 44.7%, and 17,4% in I, II, III and IV recurrence risk group, respectively. About the staging and grading we observed a recurrence rate in PUNMPL group of 3,48%, in pTaLG of 6,55%, in pTaHG of 9,42%, in pT1LG of 1,02 %, in pT1HG of 6,96% and in pCISHG dell'1,84%. The risk of bladder tumor progression was statistically higher in intermediate-risk group. we observed a progression in the 1,9% of PUNMPL, in the 53,8% of the pTaLG, in the 36,5% of the pTaHG, in the 1,92 % of the pT1LG and in the 7,6% of the pCISHG.
Conclusions
Using EORTC nomograms it is possible to separately estimate the risk of recurrence and progression for patients treated with tur for primary or recurrent non-muscle invasive bladder cancer.

3. NBI Cistoscopy Increases The Detection Rate Of Carcinoma In Situ; Rua's Experience

R. Giulianelli[1], L. Albanesi[1], G. Mirabile[1], B.C. Gentile[1], G. Rizzo[1], P. Tariciotti[1], P. Alijani[1], G. Vincenti[1]
[1] Nuova Villa Claudia (Roma)

The aim of this study was to evaluate the capacity of NBI to increase the detection rate of lesions not visible with WL cistoscopy and if we can increase the visibility of Carcinoma in situ (CIS) From June 2010 to April 2012, 797 patients, underwent to WL plus NBI cystoscopy and subsequently to Bipolar TURBt. In 797 patients, we identified a total of 1571 suspected lesions, of which 496 were single lesions and 1075, instead, multiple lesions. The use of cystoscopy with WL has allowed the identification of 1337 lesions. With the subsequent use of NBI light, we discovered 234 lesions not otherwise visible with WL. In our experience, the use of NBI significantly increases the ability of WL cystoscopy in identifying lesions ($p<0.05$) Using NBI during cystoscopy we found out 234 suspicious lesions not visisble to WL, 127 (12,1%) of those after TURBt resulted in bladder neoplasms. About this lesions NBI+ WL- 15 was CIS, 12 was a primate lesions and

3 was recurrence. The use of NBI cystoscopy is useful in the identification of CIS lesions. Despite the high rate of false positives (35,75%), the overall capacity of NBI cystoscopy to increase the predictive power to identify suspicious bladder lesions, significantly increases compared to the use of WL cystoscopy alone. In our experience, the use of NBI cystoscopy compared to WL Cystoscopy, was particularly useful in the identification of CIS lesions, showing a sensitivity and a NPV of 100% vs. 80.62% and 100% vs. 78.35%, ($p<0.05$). We can conclude that the combination of WL and NBI cystoscopy before TURBt is an economic and better diagnostic in the bladder tumours and in particolary in the Carcinoma in situ.

4. The Use Of NBI Technique After WL-TURBT Increase Ability To Identify The Persistence Of High Grade Disease? Rua's Experience

R. Giulianelli[1], L.. Albanesi[1], B.C. Gentile[1], G. Mirabile[1], G. Rizzo[1], P. Tariciotti[1], P. Alijani[1], G. Vincenti[1]

[1] Nuova Villa Claudia (Roma)

Introduction

The purpose of this study is to assess whether, after white light (WL) TURBT, the use of narrow-band imaging (NBI), used during a repeat TURBT bipolar Gyrus-PK (NBI bipolar Gyrus-PK repeat TURBT), allows to increase our ability to detect persistence of High Grade lesions not otherwise viewable with the standard method.

Materials And Methods

From June 2010 to April 2012, 797 patients affected by bladder lesions, underwent WL plus NBI cystoscopy, WL Bipolar Gyrus-PK TURBT and then a repeat TURBT using NBI.

Results

All patients were subjected to Bipolar Gyrus-PK WL-TURBT, identifying, in 512 patients, 1051 oncological bladder lesions. After repeat NBI-TURBT on the margins and on the bottom of resection, we observed the presence of 526 neoplastic lesions (50.04%) and 525 non-neoplastic lesions (49,95%). The use of NBI has allowed us to increase the ability of detecting lesions, reaching approximately a 50% ($p <0.05$) of lesions not visible only with the use of the WL, in more than 30% of patients.

We noted that the greater distribution of the lesions is located on the margins of resection after repeat NBI TURBT (28.8%). In the 526 lesions (33.46%) highlighted as oncologically significant, only after repeat NBI-TURBT 509 lesions (32.3%) had lesions that persisted after WL-TURBT (incidence exposed=0.484), while the remaining 17 lesions (1.08%) had lesions that were negative after WL-TURBT, instead were oncologically positive (incidence not exposed=0.032).

Thanks to the use of repeat NBI-TURBT, we have detected a greater number of High Grade (HG) lesions compared to the ones identified after WL-TURBT: pT1HG identified on the bed of resection (+13.22%, $p<0.05$) and pTaHG identified on the same sites (+2.07%, $p>0.05$).

Conclusions

The use of NBI (repeat NBI-TURBT) is a clear advantage in identifying persistent lesions after WL-TURBT.

5. Capacity Of The NBI Cystoscopy To Increase The Predictive Power To Identify Suspicious Bladder Lesions Compared To The Use Of The Cystoscopy In White Light. Rua's Experience

R. Giulianelli[1], L.. Albanesi[1], B.C. Gentile[1], G. Mirabile[1], G. Rizzo[1], P. Tariciotti[1], P. Alijani[1], G. Vincenti[1]

[1] Nuova Villa Claudia (Roma)

Introduction

The aim of this study was to evaluate, in the same patient before WL TURBT, the probability to increase our ability to detect bladder cancer comparing the predictive power NBI visible lesions cystoscopy versus white light visible lesions cystoscopy.

Materials And Methods

From June 2010 to April 2012, 797 consecutive patients, affected by suspected bladder cancer lesions, were underwent to WL plus NBI cystoscopy and subsequently to WL Bipolar Gyrus PK TURBT. All patients underwent preoperative white light cystoscopy: topography and characterization of neoplasms and/or suspicious lesions followed by a similar evaluation using NBI. Subsequently all the patients underwent WL resection (WLTURBT) of the previously identified lesions.

Results

we observed an overall suspicious bladder lesions detection rate equal to 1571 bladder lesions. Overall, we identified 234 patients with visible lesions only at NBI light. After the WLTURBT, we observed 1051 neoplastic lesions of the bladder; among them 532 were negative. We observed 127 bladder neoplasms in 99 patients, with negative WLI and positive NBI cystoscopy . The use of WL and NBI cystoscopy allowed us to have a sensibility of 80,66% and of 97,85% , respectively. Regarding the accuracy, we observed a 63,74% and a 62,86% respectively. Staging (CIS, $p<0,05$), grading (LG, $p<0,05$), focality (unifocal, $p<0,05$) and dimensions (< 3cm, <0,05) were statistically significant too.

Conclusion

After NBI cystoscopy, we observed an overall increased suspicious bladder lesions detection rate by 24,34% and a bladder tumours NBI positive detection rate by 12,1%. Overall false positive detection rate was 35,7%. The combination of white light and NBI cystoscopy and subsequently bipolar TURBt seems to allow a better diagnostic and therapeutic approach to bladder tumours, especially in CIS lesions, LG lesions, primitive, unifocals and <3cm lesions. The high rate of false positives could depend on artefacts produced during white light endoscopy.

6. En Bloc Thulium Laser Resection Of Bladder Tumors: 3-Yr Single Centre Experience

G. Simone[1], D. Collura[1], L. D'Urso[1], A. Giacobbe[1], R. Rosso[1], E. Casteli[1], G.L. Muto[2], G. Muto[3]

[1] Ospedale San Giovanni Bosco (Torino)

[2] Università Campus Biomedico (Roma)

[3] Ospedale San Giovanni Bosco, Università Campus Biomedico (Torino, Roma)

Introduction & Objective:

En bloc resection of bladder tumor is an oncologically appropriate technique, providing pathologist the entire tumor with its margins and resection bed. We report a 3-yr single-center experience of en bloc bladder tumor resection with thulium laser.

Materials and Methods: Data about 136 patients who underwent this technique were prospectively collected. Exclusion criteria were: tumors larger than 3 cm and patients with clinical evidence of muscle invasive disease who underwent a staging TURB. Perioperative and 3-yr oncologic outcomes were reported.

Results:

Baseline and clinical data were summarized in Table 1. Mean operative time was 26.6 minutes; in 95 tumors (69.8%) laterally located obturator reflex was never observed and ureteral orifice was successfully spared in all cases (19; 14%) where it was involved. The overall complication rate was 5.1%, with no grade ≥3 Clavien complications occurring. Mean hospital stay was 1.6 days. Pathological reports are summarized in Table 2. Three-yr recurrence free survival rates for Ta low grade tumors and papillary urothelial neoplasms of low malignant potential and for T1 high grade tumors with negative ReTURB were 78.5% (Figure 1) and 80% (Figure 2), respectively.

Conclusions:
Preliminary results suggest that en bloc thulium laser resection of bladder tumors is a safe and oncologically effective technique. Thulium laser allows surgeon to perform resection without obturator reflex and to spare ureteral orifices, making tumors laterally located and those involving the ureteral orifice the best targets for this technique.

7. Endoscopic En Bloc Enucleation Of Non Muscle-Invasive Bladder Tumor With Thulium Laser (ThuLEBT)

R. Migliari[1], A. Buffardi[1], H. Ghabin[1]
[1] A.O. Ordine Mauriziano Ospedale "Umberto I", S.C. Urologia (Torino)

Objectives
To evaluate if thulium laser enucleation of bladder tumor (THULEBT) offers more accurate pathological tumor stage in respect to monopolar resection of non muscle-invasive bladder cancer (NMIBC) without increasing complications.

Matherials And Metods
From February 2012 to September 2013, 58 patients (41 male and 17 female) newly diagnosed with single papillary bladder tumor more than 1 cm in diameter were selected for this prospective study on THULEBT. A similar historical cohort of 61 patient who underwent monopolar resection of NMIBT was used to compare the two procedures.

Results
A total of 72 neoplasms were removed with THULEBT from 58 patients. Mean tumor diameter was 2.5 cm (range, 0.5-4.5). Mean operative time was 25 minutes (range, 12-30). Cold-cup biopsy of the tumor base (in 90 days) was negative for BC persistence or recurrence in all patients with NMIBC treated with THULEBT. In Group B, 7 patients were found with a disease persistence. In 8 cases of TURB-T patients no detrusor muscle was identified, while it was always easily identified in THULEBT group. No patient experienced obturator nerve reflection intraoperatively and no bladder perforation were evidenced in dome located neoplasm. When involved, ureteral meatus was sharply excised without subsequent post-operative evidence of distortion. No significant intraoperative or postoperative bleeding occurred.

Conclusion
En bloc resection of bladder tumors may represent a potential alternative to TURB-T which nowadays is considered the standard for diagnosis and treatment of NMBIC. THULEBT allows accurate reporting of neoplastic depth invasion avoiding the need to restage bladder tumor at 90 days. All the different intravesical site of the BC may be enucleated with the thulium laser which could offer advantage over the monopolar energy especially when the tumor is positioned in the lateral bladder wall or in the bladder dome or in perimeatal zone.

8. Risk Assessment Of Chronic Kidney Disease Development In Patients Undergone Robotic Radical Cystectomy And Totally Intracorporeal Diversion.

M. Ferriero[1], G. Simone[1], R. Papalia[2], R. Mastroianni[2], S. Guaglianone[1], M. Gallucci[1]
[1] Istituto Nazionale Tumori "Regina Elena" , U.O. Urologia (Roma)
[2] Università Campus Bio Medico, Unità di Urologia (Roma)

Introduction And Objectives:
In the last few years robotic radical cystectomy (RRC) for muscle invasive bladder cancer began to gain popularity. Anyway, total intracorporeal diversion is a challenging procedure. In this series we presented the risk assessment of chronic kidney disease (CKD) development in our first 100 patients treated with RRC and intracorporeal urinary diversion.

Methods:
From October 2012 to September 2014, 100 consecutive unselected patients with cT2-4a/cN1-3/cM0 bladder cancer underwent RRC, extended lymphadenectomy and totally intracorporeal diversion. Baseline demographics, perioperative and follow up data were prospectively collected. Univariable and multivariable cox analysis were performed to identify independent predictors of increased risk of CKD development.

Results:
Out of 100 RRC, we selected 87 consecutive patients with at least a 3-month follow up. Sixty-nine patients received a Padua Ileal bladder (54 male and 15 female), while 18 patients received an ileal conduit. Nineteen patients underwent neoadjuvant chemotherapy (21.8%). At a median follow up of 11 months [interquartile range (IQR): 7–16 mo], 17 (19.5%) patients experienced IIIb-IV stage CKD. A 2-3 grade hydronephrosis occurred in 11 of the 17 patients with renal function deterioration. All these patients were successfully treated with antegrade ureteral stenting. At univariable analysis age, gender, BMI, preoperative eGFR, urinary diversion and neoadjuvant chemotherapy (all $p < 0.001$) were associated with an increased risk of CKD development. At multivariable analysis, the only independent predictor of renal function deterioration was preoperative eGFR ($p = 0.003$; HR: 0.93 [95% CI, 0.88–0.97]).

Conclusions:
RRC with totally intracorporeal urinary diversion is feasible and safe. A strict follow up, especially in patients with pre-existing renal deterioration, is recommended to early identify and promptly treat complications in order to protect upper urinary tract and preserve renal function.

9. Development Of A Nomogram Predicting 90-Day Probability Of Severe Complications In Patients Undergoing Radical Cystectomy

G. Simone[1], L. Benecchi[2], C. De Nunzio[3], R. Papalia[4], M. Ferriero[5], L. Cindolo[6], A. Antonelli[7], P. Parma[8], A. Porreca[9], M. Alvarez Maestro[10], S. Serni[11], A. Minervini[11], R. Spadavecchia[12], V. Pagliarulo[12], S. Crivellaro[13], B. Rocco[14], M.P. Serrago[14], S. Zaramella[15], A. Celia[16], V. Pizzuti[17], P. Bove[18], A. Tubaro[3], S. Guaglianone[5], G. Muto[19], M. Gallucci[5]

[1] Istituto Nazionale Tumori "Regina Elena", Ospedale San Giovanni Bosco (Roma, Torino)
[2] Ospedale di Cremona (Cremona)
[3] Ospedale Sant'Andrea (Roma)
[4] Istituto Nazionale Tumori "Regina Elena", Università Campus Biomedico (Roma)
[5] Istituto Nazionale Tumori "Regina Elena" (Roma)
[6] Ospedale di Vasto (Vasto)
[7] Università di Brescia (Brescia)
[8] Ospedale Fatebenfratelli ed Oftalmico (Milano)
[9] Policlinico Di Abano (Abano Terme)
[10] Hospital Universitario Infanta Sofia (Madrid)
[11] Ospedale Careggi, Università di Firenze (Firenze)
[12] Università "Aldo Moro" di Bari (Bari)
[13] Università di Udine (Udine)
[14] Policlinico di Milano (Milano)
[15] Azienda Ospedaliero-Universitaria Maggiore della Carità (Novara)
[16] Ospedale "San Bassiano" (Bassano del Grappa)

[17] ASL 9 Grosseto (Grosseto)
[18] Policlinico Tor Vergata (Roma)
[19] Ospedale San Giovanni Bosco, Università Campus Biomedico (Torino, Roma)

Introduction And Objectives:
Despite the improvements in surgical technique and perioperative care, radical cystectomy (RC) is associated with significant incidence of perioperative complications also in contemporary series [1]. We developed a model predicting 30-day severe complication (grade ≥3) risk according to Clavien Classification System (CCS) to be used in the preoperative patients counseling.

Methods:
Data of 396 consecutive patients treated with RC and pelvic lymph node dissection at 17 institutions between April 2011 and March 2012 were prospectively collected.
Logistic regression analysis was used to predict 30-day severe complication risk, including the following variables: age, body mass index (BMI), American Society of Anaesthesiologists (ASA) score, hemoglobin levels (Hb), yearly cystectomy caseload and urinary diversion performed.

Results:
The overall incidence of 30-day severe complications was 15%.
Regression coefficients used to develop the nomogram were: age (OR 1.59, 95% CI 0.94-2.7), body mass index (OR 1.04, 95% CI 0.74-1.47), ASA score (OR 1.31, 95% CI 0.85-2.01), preoperative hemoglobin levels (OR 0.69, 95% CI 0.45-1.05), yearly cystectomy caseload (OR 0.73, 95% CI 0.54-0.99), and urinary diversion performed (ureterocutaneostomy: reference category; ileal conduit: OR 2.52, 95% CI 1.15-5.53; ileal neobladder: OR 6.04, 95% CI 2.21-16.5). The nomogram had a discrimination accuracy (c-index) of 0.68 and was well calibrated. The internal validation of the model with 200 bootstrap resamples demonstrated a discrimination accuracy of 0.64.

Conclusions:
At the best of our knowledge we first developed a nomogram predicting 30-day severe complication risk according to CCS that may be a clinical tool to counsel patients in the preoperative setting about the potential impact of UD choice on perioperative outcomes. Larger cohorts and external validation are needed to confirm the clinical utility of the nomogram.

10. Prediction Of 30-D Clavien Grade ≥3 Complication Rate In Robot-Assisted Radical Cystectomy With Totally Intracorporeal Urinary Diversion

G. Simone[1], G. Tuderti[2], R. Papalia[3], M. Ferriero[4], R. Mastroianni[4], G.L. Muto[5], S. Guaglianone[4], G. Muto[5], M. Gallucci[4]
[1] Istituto Nazionale Tumori "Regina Elena", Ospedale San Giovanni Bosco (Roma, Torino)
[2] Istituto Nazionale Tumori "Regina Elena", Università "Sapienza" di Roma (Roma)
[3] Istituto Nazionale Tumori "Regina Elena", Università Campus Biomedico (Roma)
[4] Istituto Nazionale Tumori "Regina Elena" (Roma)
[5] Università Campus Biomedico (Roma)

Introduction & Objective:
Minimally invasive radical cystectomy with totally intracorporeal urinary diversion (UD) is a challenging procedure that is gaining popularity thanks to robotic platform. In this study we analyzed a cohort of 100 consecutive cases of Robot-Assisted Radical Cystectomies (RARCs) to identify predictors of 30-d severe complications.

Materials and Methods:
Between August 2012 and September 2014 100 patients underwent RARC with totally intracorporeal UD. All procedures were performed by the same surgical team. Baseline, and perioperative outcomes were collected and analyzed. Univariable and multivariable Cox analyses were performed to identify predictors of 30-d Clavien grade ≥3 complications.

Results:
The overall incidence of 30-d complications was 50%, while the 30-d Clavien grade ≥3 complications rate was 21%.
At univariable Cox analysis, age (continuous, p<0.001), learning curve (each unit increase; p<0.001), ASA score (p<0.001), body mass index (p<0.001), preoperative hemoglobin levels (p<0.001), estimated glomerular filtration rate(e-GFR) (p=0.001) and UD (p=0.004) were significant predictors of 30-d grade ≥3 Clavien complications occurrence (Table 1).
At multivariable Cox analysis, the number of procedures performed (each unit increase) and the UD performed (ileal conduit vs. orthotopic ileal neobladder) were the only independent predictors of lower 30-d grade ≥3 complications rate (p=0.03 [HR 0.978, 95%CI 0.96-0.99] and p=0.039 [HR 0.10, 95% CI 0.12-0.89] , respectively) (Table 2).

Conclusions:
Learning curve and orthotopic neobladder are independent predictors of severe complications after RARC with totally intracorporeal UD.

11. Tasca Continente Ileocecale Nella Donna: Indiana Pouch Con Teniotomie Multiple

G. Cucchiarale[1], G.L. Milan[1], F. Valentino[1], U. Ferrando[1]
[1] Clinica Cellini - Humanitas (Torino)

Nella donna sottoposta a cistectomia radicale, la derivazione urinaria urinaria che ci ha dato maggiori soddisfazioni in termini di continenza urinaria e di qualità di vita, è stata senza dubbio il serbatoio ileo cecale Indiana Pouch con teniotomie multiple sec. Alcini. Il confezionamento di questo serbatoio continente prevede: l'isolamento dell'ultimo tratto di ileo (20 cm) , della valvola ileo cecale, del ceco e dei primi 20 cm di colon ascendente. La riduzione di calibro del tratto ileale efferente, con sutura manuale o con suturatrice meccanica GIA, ed il suo successivo abboccamento alla cute, permettono l' agevole introduzione e progressione di un catetere di 14 Ch, atto a consentire lo svuotamento periodico della pouch. I punti di Lembert di rinforzo della valvola ileo-cecale, costituiscono un rinforzo del suo naturale meccanismo di continenza. L'anastomosi dei due ureteri con tecnica anti reflusso, viene effettuata su due tenie cecali. L'esecuzione di teniotomie multiple con accurato rispetto dell'integrità della mucosa cecale, determina l'abbattimento della pressione endocavitaria del serbatoio in fase di riempimento. Le basse pressioni endocavitarie e l'aumentata capacità della pouch preservano le alte vie urinarie e garantiscono anche una adeguata autonomia minzionale. Questa derivazione urinaria continente, nella nostra esperienza, consente un' ottima qualità di vita nel rispetto dell'integrità dello schema corporeo della paziente, unita ad un'eccellente performance funzionale urodinamica.

12. Risk Assessment Of Late Complications After Robotic Radical Cystectomy With Total Intracorporeal Urinary Diversion

M. Ferriero[1], G. Simone[1], R. Papalia[2], S. Guaglianone[1], M. Gallucci[1]
[1] Istituto Nazionale Tumori "Regina Elena" , U.O. Urologia (Roma)
[2] Università Campus Bio Medico, Unità di Urologia (Roma)

Introduction And Objectives:
Robotic radical cystectomy (RRC) with intracorporeal urinary diversion (UD) is a challenging procedure with a high rate of perioperative complications. In this study we assessed the risk of late complications after RRC with intracorporeal UD.

Methods:
From October 2012 to October 2014, 100 consecutive unselected patients with cT2-4a/cN1-3/cM0 bladder cancer underwent RRC, extended lymphadenectomy and totally intracorporeal UD. Baseline demographics, perioperative and follow up data were prospectively collected. Univariable and multivariable regression analysis were performed to identify independent predictors of surgery related (SR) and any kind of late complications at six-mo evaluation.

Results:
Out of 100 RRC, we selected 87 consecutive patients with a minimum 6-mo follow up. Sixty-nine patients received a Padua Ileal bladder (54 male and 15 female), while 18 patients received an ileal conduit. At a six-mo follow up 60 (68.9%) patients experienced any kind of late complication, 49 (56.4%) were SR. Ortotopic UD, preoperative eGFR and learning curve were significant predictors of SR complication at univariable analysis (p=0.032, p=0.042 and p=0.05, respectively). At multivariable analysis, the only independent predictor of surgical related late complications was orthotopic UD (p = 0.010; HR: 5.01 [95% CI, 1.47–17.04]). Learning curve and preoperative eGFR were significant predictors of any complications at univariable analysis (p= 0.008, andp=0.044, respectively). At multivariable analysis, the only independent predictor of any kind of late complications was the learning curve (p = 0.025; HR: 0.97 [95% CI, 0.95–0.99]).

Conclusions:
RRC with intracorporeal neobladder is feasible but associated to higher risks of SR complications at six-mo evaluation. Learning curve plays a key role for a stepwise reduction of perioperative complications.

13. Robot-Assisted Totally Intracorporeal Partly Stapled Vescica Ileale Padovana (VIP)

R. Papalia[1], G. Simone[2], M. Ferriero[3], R. Mastroianni[3], S. Guaglianone[3], G. Muto[4], M. Gallucci[3]
[1] Università Campus Biomedico, Istituto Nazionale Tumori "Regina Elena" (Roma)
[2] Istituto Nazionale Tumori "Regina Elena", Ospedale San Giovanni Bosco (Roma, Torino)
[3] Istituto Nazionale Tumori "Regina Elena" (Roma)
[4] Università Campus Biomedico (Roma)

Introduction And Objectives:
Robotic radical cystectomy (RC) with intracorporeal neobladder reconstruction is gaining popularity. Nevertheless it is still considered a challenging procedure characterized by a long operative time. Perioperative outcomes of robot assisted totally intracorporeal , orthotopic, Padua neobladder, using staplers to configure part of the neobladder are presented.

Methods:
From August 2012 to June 2014, 86 patients underwent robot-assisted RC with totally intracorporeal VIP. Staplers were used to configure part of the reservoir: neobladder neck and left aspect of the neobladder. Baseline demographics, pathology data, complications, and functional outcomes were assessed.

Results:
Robotic intracorporeal urinary diversion was successfully performed in 86 patients with a minimum 90-d follow-up. No intraoperative complications requiring transfusion or conversion to open surgery occurred. Median age and body mass index were 65 yr (61-70) and 27 kg/m2 (24,4-30), respectively. 31.5 % of the patients received neoadjuvant chemotherapy. Mean estimated blood loss was 210 ml (SD 60), median time to regular diet was 6 d (range: 5–21 d), median hospital stay was 9 d (range: 6–45 d). Minor complications (Clavien grade 1–2) occurred in 15 (27%) patients and major complicatios (grade 3–5) in 8 (9%) patients. Daytime and nighttime continence was 74.4% and 47.7%, respectively. No stones in the neobladder were observed during the follow-up. This study is limited by small sample size and short follow-up period.

Conclusions:
Robot-assisted orthotopic neobladder (VIP) is feasible and safe. The partially stapled neeobladder we presented could shorten operative time for totally intracorporeal urinary diversions.

14. Una Problematica Esplosiva, I Tumori Neuroendocrini Della Vescica

L. Pucci[1], P. Fedelini[1], F. Monaco[1], G. Battaglia[1], R. Giannella[1], M. Fedelini[1], C. Meccariello[1], F. Chiancone[1], M. Carrino[1]
[1] A.O.R.N. A. Cardarelli (Napoli)

La recente segnalazione al nazionale AURO 2014 di un caso raro di carcinoma vescicale a piccole cellule, ci ha indotto alla revisione della nostra casistica riguardante i tumori vescicali sottoposti a TURV presso il nostro nosocomio, con particolare attenzione a quelli con insoliti aspetti macroscopici. Da Gennaio 2014 a Gennaio 2015 sono giunti sette pazienti con ematuria macroscopica massiva e disuria tale da rendere necessario l'apposizione di un catetere di tipo Dufour con lavaggio vescicale. In un caso il paziente era affetto anche da ritenzione urinaria acuta. Le ecografie non erano dirimenti in quanto in vescica erano presenti numerosi coaguli. Si procedeva a detamponamento vescicale, TUR emostatica e stadiante ed in seguito a nefrotomia bilaterale. Le neoformazioni risultavano solide e biancastre al taglio. In tutti casi la neoplasia interessava il collo vescicale ed il trigono. L'istologia mostrava in tutti i casi una "Neoplasia maligna costituita da cellule di piccola e media taglia con scarso citoplasma e cromatina finemente azzollata, tipo "sale e pepe"; nuclei picnotici rotondi. L'immunoistochimica ha mostrato positività delle cellule neoplastiche per Pancitocheratina. CD56 e Sinaptofisina. PSA negativo. Reperto morfologico "Carcinoma neuroendocrino a piccole cellule della vescica. La neoplasia infiltra il connettivo suburoteliale e la tonaca muscolare". I pazienti fuorono sottoposti a dosaggio della Cromogranina A (media 679 picog/l, range 205-964 picog/l). L'incidenza di questa neoformazione è molto bassa (1-9/1.000.000) ma la prognosi è sfavorevole. Infatti i dati preliminari mostrano una prognosi media a 6 mesi dalla diagnosi. L'opzione terapeutica di prima scelta è la chemioterapia ad eccezione dei casi in cui la "cistectomia di salvataggio" è effettuata a scopo emostatico. Il riscontro di ematuria importante e disuria ed una neoformazione di aspetto solido alla cistoscopia deve far sorgere il dubbio che si tratti di una neoplasia vescicale più rara ed a prognosi peggiore rispetto al classico urotelioma.

Lunedì 25 maggio

Sala D

08:00 -09:30

Discussione di Poster Digitali 2

Prostata in tutte le salse

Moderatori:
Maria Consiglia Ferriero
Roberto Giulianelli
Michele Potenzoni

1. A New Device For An Old Problem

C. Calcagno[1], G.M. Badano[1], E. Daglio[1], E. Rikani[1], L. Timossi[1], T. Montanaro[1], C. Introini[1]
[1] Ospedale Evangelico Internazionale (Genova)

We present a new device for a temporary treatment of male and female urethral strictures. Urethral strictures represent a very old problem in the urological practice and, admittedly, urological diseases are old as mankind.The new device presented in this paper represents a simple, not invasive and elegant solution to a very frequent issue in the urological practice: complex catheterism due to urethral stricture. Coping with a difficult catheterism due to urethral stricture is one of the more frequent clinical problems in urological practice and may reveal very difficult and request flexible urethrocystoscopy with passage of a guide wire through the urethral stricture. We have also have to keep in our mind that urologist is often the last resource after many attempts of catheterism and he can find a very damaged urethra with contemporary urethrorragy.
In the past, in case of difficult catheterism,we were used to pass a modified Mercier catheter, cut on the tip, with a guide wire inside the catheter, . On the guide wire passed beyond the stricture, we passed the catheter into the bladder. We retired the Mercier catheter and carried on with the passage on guide wire of a silicone Foley catheter pierced on the tip with a needle. The most important shortcoming of this handicraft procedure was abrasiveness of the tip of the catheter with potential damage of urethral wall. To provide this drawback, we have conceived a solution to this problem which consents the passage of catheter in a large number of complex catheterism.

2. Valutazione Degli Outcomes Peri-Operatori Nella Vaporizzazione Fotoselettiva Con Green-Light 180-W Attraverso La Curva Di Apprendimento Di Un Singolo Chirurgo

S.. Ricciardulli[1], R.. Napoli[1], F. Borgatti[1], M.. Spagni[2], G. Ruoppo[1], D. Viola[1], S. Spatafora[1], F. Bergamaschi[1]
[1] Arcispedale Santa Maria Nuova, U.O. Urologia (Reggio Emilia)
[2] Arcispedale S. Maria Nuova, U.O. Urologia (Reggio Emilia)

La vaporizzazione laser fotoselettiva con Green-light 180-W rappresenta un tecnica minimamente invasiva. Grazie anche alla recente introduzione delle fibre MoXy da 532 nm che aumentano l'area di l'ablazione del tessuto e riducono il sanguinamento, emerge come tecnica di riferimento nel trattamento dell'ipertrofia prostatica. Scopo dello studio è di valutare l'evoluzione temporale degli outcomes peri-operatori attraverso la curva di apprendimento di un singolo chirurgo. Questo è uno studio retrospettivo su pazienti trattati presso il nostro centro con vaporizzazione fotoselettiva della prostata con Green-light 180-W. I dati sono stati estratti dal nostro database medico. Per valutare la curva di apprendimento dell'operatore nella vaporizzazione fotoselettiva della prostata con laser greenlight 180-W abbiamo suddiviso il campione in tre ere successivi (primi 50, dal 51 al 99 e dopo 100). Le variabili quantitative sono state riassunte attraverso adeguati indici statistici di posizione e di dispersione: media e deviazione standard. Per confrontare le ere sono state utilizzate tecniche statistiche non parametriche come il test di Kruskall Wallis per le variabili continue e Pearson test per le frequenze. 171 sono entrati in questo studio. Le tre ere hanno presentato caratteristiche pre-operatorie simili in termini di età (p-value: 0.346), PSA (p-value: 0.648), volume prostatico (p-value: 0.850), flusso massimo (p-value: 0.887), IPSS (p-value: 0.544) e IPSS-QoL (p-value: 0.383). Differenze significative sono state osservate nella riduzione del tempo operatorio (p-value <0.001), complicanze intra-operatorie (p-value 0.013), degenza media (p-value 0.001) e tempo di rimozione del catetere vescicale (p-value 0.05). In tutte le ere non sono state osservate differenze significative in termini di complicanze post-operatorie valutate secondo la classificazione di Clavien-Dindo. Questo studio ha lo scopo di dimostrare l'efficacia della vaporizzazione laser della prostata e di valutare il cambiamento degli outcomes peri-operatori attraverso la curva di apprendimento di un singolo chirurgo.

3. Transurethral Bipolar Enucleation With Button Electrode (B-Tuep) For The Treatment Of Bladder Outlet Obstruction (Boo) Due To Benign Prostatic Hyperplasia (Bph). Rua's Experience

R. Giulianelli[1], L. Albanesi[1], B.C. Gentile[1], G. Mirabile[1], G. Rizzo[1], P. Alijani[1], P.. Tariciotti[1], G. Vincenti[1]
[1] Nuova Villa Claudia (Roma)

Introduction
To evaluated the safety and efficacy of Transurethral Bipolar Enucleation with Button electrode (B-TUEP) for the treatment of bladder outlet obstruction (BOO) due to benign prostatic hyperplasia (BPH).

Methods
Between July 2011- March 2012 a single surgeon performed 50 B-TUEP.
Pre and postoperative investigation protocols included PSA dosage, IPSS, IEFF-5, QOL, Uroflowmetry with post-voiding residual urinary volume (PVR) and transrectal ultrasonography assessing prostate volume. Intraoperatively, we evaluated B-TUEP time (enucleation and resection time). Perioperatively we evaluated Hb dosage, bladder irrigation's time, catheterization's time, acute urinary retention events, hospital's stay, patient readmission and eventual endoscopic retreatments.

Results
Three months after surgery 82% of the patients presented a significant improvement of Qmax (p<0,001). After 6 and 12 months the 80% and 83,3% of patients, respectively, maintain the significant improvement (p<0,001). About secondary endpoints: IPSS, QOL, IEFF-5 and PVR, presentented a statistical significant improvement in comparison with baseline values. We didn't observe a significant modification of haemoglobin values before and after surgery. Bladder irrigation time was >24 h <36h for about the 80% of patients, in one case was necessary a second look haemostatic endoscopy. Hospital stay after surgery was less than 48 hours in 88% of cases. 6% of patients required to be admitted again to the hospital for haematuria and 2 others patients after six months suffered from bladder neck contracture that have been treated with TUIP.

Conclusions
Transurethral Enucleation of Prostate with Button electrode (B-TUEP) with Gyrus PK system is a rapid and safety technique, showing optimal outcomes.

4 . Head To Head Comparison Of Astro, Phoenix And Stuttgart Criteria In Patients Treated With High Intensity Focused Ultrasound For Primary Prostate Cancer

G. Simone[1], L. D'Urso[1], D. Collura[1], A. Giacobbe[1], G.L. Muto[2], R. Rosso[1], E. Castelli[1], G. Muto[3]
[1] Ospedale San Giovanni Bosco (Torino)
[2] Università Campus Biomedico (Roma)
[3] Ospedale San Giovanni Bosco, Università Campus Biomedico (Torino, Roma)

Introduction & Objective:
There is not a consensus regarding the prognostic efficacy of different criteria to define treatment failure after High Intensity Focused Ultrasound (HIFU) for prostate cancer (PCa). In this study we evaluated the prognostic efficacy of commonly used prognosticator according to ASTRO, Phoenix and Stuttgart criteria.

Materials and Methods:
Baseline, perioperative and oncologic outcomes of 251 consecutive patients treated with HIFU for primary PCa between 2004 and 2014 were prospectively collected into an institutional database.
Treatment failure was coded according to available criteria described above. Univariable and multivariable Cox analyses were performed to test the efficacy of known prognostic factors in predicting outcomes according to the 3 criteria.

Results:
One-yr recurrence free survival rates were 80.7%, 64.1% and 37.3% according to Phoenix, ASTRO and Stuttgart criteria, respectively, while 5-recurrence free survival rates were 70.3%, 46.1% and 28.5%, respectively (Figure 1).
At univariable Cox analysis baseline PSA, cT stage and biopsy Gleason score were significant predictors of recurrence according to Phoenix criteria (all p ≤0.003), while none of these variables was predictive of recurrence neither according to ASTRO nor to Stuttgart criteria (Table 1). At multivariable Cox analysis, biopsy Gleason score and cT stage were independent predictors of recurrence according to Phoenix criteria (p=0.049 [HR 1.67, 95% CI 1.01-2.789] and p=0.005 [HR 1.38, 95% CI 1.1-1.73]).

Conclusions:
Established prognosticators of PCa recurrence-free survival do not accurately predict oncologic outcomes according to ASTRO or Stuttgart criteria after HIFU for PCa. In the preoperative patients counseling the only criteria that provide an accurate prediction of recurrence free survival based on commonly used clinical parameters are Phoenix criteria.

5. A Simple Trick To Recover A Partial Rupture Of Vesicourethral Anastomosis

S.. Zambito[1], A. Nordio[1], S. Confalonieri[1], F. Franzoso[1]
[1] Azienda Ospedaliera di Desio e Vimercate (Desio)

Introduction:
Partial Rupture of vesicourethral anastomosis following laparoscopic radical prostatectomy is a complication that requires immediate management. We evaluated the morbidity of this rare complication

Aim:
Presentation two cases of managing postoperative urine leakage with a simple trick

Material And Methods:
We analyzed retrospectively 2 cases of partial disruption of vesicourethral anastomosis during post-operative period in a consecutive series of 210 laparoscopic radical prostatectomy, performed by a single surgeon.

Results:
Urine leakage started after 1 and 2 days postoperatively manifested by hematuria and spasms. Management was conservative in all two cases with a catheter permanence time 18 and 22 days. One case was secondary to bleeding with pelvic hematoma, the other case was secondary to traction accidental to the cateter. Leakage stopped with only fix of the vesical catheter with a patch sticker upon the catheter without inflating baloon to avoid pressure on the bladder neck area where you have the rupture. We evaluated patients in the period ranging from 6 to 12 months. Nobody of two patients evolved with urethral stenosis. Moreover the continence was complete for one patient; the other use one pad to protection. Moreover the continence was complete for one patient; the other use one pad to protection. About the sexual potency the surgery was not nerve sparing and the age of patients was 72 and 71 years.

Conclusions:
Rupture of vesicourethral anastomosis is not related to the surgeon's experience, and conservative treatment has shown to be effective

6. Single Barbed Suture For Vesicourethral Anastomosis During Extraperitoneal Laparoscopic Radical Prostatectomy

A. Nordio[1], S. Zambito[1], S. Confalonieri[1], F. Franzoso[1]
[1] Azienda Ospedaliera di Desio e Vimercate (Desio)

Introduction:
We aim of our study is to investigate and analyze the impact of single barbed suture (SBS) for vesicourethral anastomosis (VUA) during extraperitoneal laparoscopic radical prostatectomy for lacalized prostate cancer.

Methods:
The polyglyconate SBS V-Loc was used for VUA during extraperitoneal laparoscopic radical prostatectomy in 60 patients who were diagnosed with organ-confined prostate cancer between January 2010 and Dicember 2014. The operative and postoperative parameters were then compared with those of 60 patients who had previously undergone the same procedure but with the monofilament poliglecaprone suture Monocryl. All procedures were performed by the same experienced surgeon.

Results:
VUA time was significantly shorter in the V-Loc group (20.2 ± 2.8 min) than in the Monocryl group (27.1 ± 4.3 min) (P < 0.001). The percentage of patients who required no more than one pad per day at 3 months postoperatively was the same in the V-Loc

group (63.3%) and in the Monocryl group (56.3%) (P = 0.043). No significant differences in other perioperative parameters were observed between the two groups and no clinically rilevant stenosys of the vescicouretral were detected.

Conclusion:
Using single barbed suture (SBS) prevents suture slippage and enables tieless anastomosis. vesicourethral anastomosis (VUA) using a SBS may relieve surgeon stress because a rapid and secure anastomosis is achievable.

7. Laparoscopic Radical Prostatectomy Without Ligation Of The Santorini's Venous Plexus: Our Experience

S. Zambito[1], A. Nordio[1], S. Confalonieri[1], F. Franzoso[1]

[1] Azienda Ospedaliera di Desio e Vimercate (Desio)

Background:
Is the ligation of Santorini's dorsal venous complex necessary?. The retrospective evaluation of video-laparoscopich radical prostatectomy performed at UOC of Desio with this technical , showed an increased blood loss compared to a technique that provides for the ligation of Santorini's plexus and, overall, reduced blood loss compared with the average radical open prostatectomy.

Material And Methods:
200 video-laparoscopic extraperitoneal radical prostatectomies were evaluated, which were performed with the same technique and by the same operator. The technique involves the non-ligation of Santorini's venous plexus. Surgical, oncological, functional outcomes were considered and in particular blood loss.

Results:
The results are consistent with those reported in literature, and without ligation of the Santorini's venous plexus , there has been no increase in blood loss intra-and / or post-operatively, or in the percentage of patients with hemotransfusion.

Conclusion:
The video-laparoscopic radical prostatectomy, although a not yet codified and standardized technique for the treatment of organ-confined prostate cancer, did show oncological and functional results basically l similar to open-sky technique. But compared to this, it has certainly demonstrated a lower blood loss and a reduction of morbidity. The non ligation of Santorini's venous plexus, always necessary during open prostatectomy, in our experience is not necessary in video-laparoscopy

8. Assessment Of Local Prostate Cancer Recurrence After Prostatectomy Using Multi-Parametric Magnetic Resonance Without Endorectal Coil: Preliminary Experience

G.C. Rocca[1], M.. Tilli[1], C. Ballista[1], M. Bernabei[1], M.. Gatti[2], G. Benea[2], M. Simone[1]

[1] Ospedale del Delta AUSL Ferrara, U.O. Urologia (Lagosanto)

[2] Ospedale del Delta AUSL Ferrara, U.O. Radiologia (Lagosanto)

Introduction:

Clinical suspicion of prostate cancer (PC) recurrence after radical prostatectomy (RP) is based on biochemical relapse. An imaging modality is strongly desirable to identify and correctly localize local PC recurrence, also in order to guide possible target loco-regional therapy and to reduce procedure related complications and toxicity. Aim of this preliminary study is to evaluate clinical practice value of multiparametric Magnetic Resonance Imaging (Mp-MRI) in the detection of local recurrence after RP.

Materials & methods:
32 consecutive patients with biochemical failure after RP underwent mp-MRI. PSA levels ranged from 0.15 to 5.86 ng/mL. Tw radiologists blinded to clinical data reviewed MRI scans together and quantified likelihood of tumor recurrence on a 1 to confidence scale, considering each MRI parameter (T2-w, DWI and DCE). A MRI cutoff threshold (at least grade 3) was adopt to define positive MRI results. Standard of reference for MRI results were considered 11C-Cho PET positivity, positive biop findings in prostatectomy bed and reduction of PSA values after radiotherapy.

Results:
24 out of 32 patients presented nodules with highly suspicion of recurrence at MR images (3 with grade 5, 16 with grade 4 a 9 with grade 3 of confidence). Diameter of suspected local recurrences detected varied from 0.5 to 2 cm. In comparison reference standards we obtained values of sensibility and specificity respectively of 85% and 90%. Positive and negative predicti values in detecting locoregional relapse were, respectively, 94.5% and 75%. Among different MRI parameters DCE appears have higher specificity (95%) in detecting tumor recurrence.

Conclusion:
Mp-MRI can be a promising tool in the management of suspected relapse in patients with biochemical failure after RP. Detecti of and localization of local recurrence could also improve the targeting of salvage radiotherapy or other loco-regional ablati techniques, also reducing complications.

9. Persistent Haematuria After Laparoscopic Radical Prostatectomy Can Predict Urinary Leakage At The Vesicourethral Anastomosis?

A. Nordio[1], S. Zambito[1], S. Confalonieri[1], F. Franzoso[1]

[1] Azienda Ospedaliera di Desio e Vimercate (Desio)

Objective:
The aim of this investigation was to determine whether postoperative haematuria could be used as a predictor for the presence or absence of a urinary leakage at the vesicourethral anastomosis after laparoscopic extraperitoneal radical prostatectomy for localized prostate cancer.

Material And Methods:
In this preliminary study, the urine colour of 50 patients who underwent laparoscopic extraperitoneal radical prostatectomy due to histologically proven localized prostate cancer was assessed macroscopically and microscopically on postoperative day (POD) 4, 5 and 6. All patients underwent evaluation of perianastomotic extravasation by trans-rectal ultrasound (TRUS) on POD 6. Baseline characteristics included age; prostate-specific antigen; prostate volume; tumour, node, metastasis classification; and Gleason score.

Results:
The urine colour was a highly significant predictor for perianastomotic extravasation in TRUS when it was red on POD 5 and 6. The sensitivity and specificity of urine colour as a predictor for extravasation were 71.4% and 83.2% on POD 71.4% and 85.8% on POD 5, and 81.8% and 90.9% on POD 6, respectively, with a clear or slightly ensanguined urine colou The negative and positive predictive values were 98.6% and 81.8%, respectively.

Conclusion:
Persistent haematuria shows an increased risk of missing a perianastomotic extravasation diagnosticated at transrectal ultrasound.

10. Multiparametric MR Of The Prostate In Patients With Previous Negative Biopsies

M. Potenzoni[1], C. Grassani[1], N. Uliano[1], A.M. Pieri[1], S. Destro Pastizzaro[1], D. Martines[1], R. Arnaudi[1], A. Savino[2], A. Prati[1]

[1] Ospedale di Vaio (Fidenza)

[2] Ospedale di Vaio (Fidneza)

Introduction

The clinical indications to multiparametric MR of the prostate continue to evolve.We evaluated the utility of multiparametric MR of the prostate in the "grey zone" patient population who had a previous negative prostate biopsy and persistent high tPSA.

Methods

We evaluated retrospectively the data from a group of patients who underwent to MRI/US cognitive prostate biopsies from May2013 to September 2014.All the patients had a previous negative 12-core prostate biopsy.In all patients, multiparametric prostate MR without endorectal coil was performed using T2-weighted, diffusion-weighted and dynamic contrast-enhanced imaging (T2WI,DWI,DCE-MRI).1.5TMR imaging have been used in all the patients.The radiologist reported the region of interest(ROI)in the final imaging report.The radiologist and the urologist revaluated together the imaging before the biopsy.All patients had 10-core standard biopsy(SB)and 2-core cognitive target biopsy(CB)with transrectal ultrasonography(US)guidance according to the MR results.

Results

Based on increasing tPSA levels,35 patients in our institution were sent for prostate biopsies in the period between 05/2013 and 09/2014 according to the results of the prostate MR. All the regions of interest were reported according with PIRADS system.A single genitourinary pathologist reviewed pathology.Mean PSA was 7.4 ng/ml, median prostate volume was 48gr, PSA velocity was 1,15(ng/l/yr)with a mean age of 65 years. Patients presented ROI PIRADS<2 in 7(20%)cases, PIRADS3 in 11(31,43%)cases, PIRADS4 in 12(34,29%)cases and PIRADS5 in 5(14,29%)cases.Positivity biopsy rate for prostate cancer PCa was 51,3%(npt.=18), positivity biopsy rate for clinically significant PCa is 40%(npt.=14)and clinically insignificant cancer is 11,4%(npt.=4)after target cognitive biopsy.17 patients(48,5%)underwent to radical prostatectomy.Final pathology reports were pT2b in 2 patients(11.8%),pT2c in 5 patients(29.5%),pT3a in 6 patients(35.2%)and pT3b in 4 patients(23.5%).

Conclusion

MR multiparametric prostate biopsy increases the detection rate of prostate cancer diagnosis in previous negative biopsy patient population with tPSA elevated.In particular cognitive fusion biopsy increase the detection rate of clinically significant disease in this group of patients.

11. Day Surgery Seminal-Sparing Open Radical Prostatectomy

M. Mari[1], S. Guercio[1], F. Mangione[1], A. Ambu[1], M. Bellina[1]

[1] Ospedale di Rivoli (Rivoli)

Objectives:

to assess the safety of hospital discharge 24h after minimaly invasive radical prostatectomy (seminal-nerve sparing open radical prostatectomy, with no lymphadenectomy). Herein we report our selection criteria, discharge criteria and patients satisfaction.

Methods:

we performed a prospective study with 8 patients undergoing open seminal-nerve sparing radical prostatectomy, using Erbeject 2 for the neurovascular bundles hydrodissection, in spinal anesthesia with Bupivacaine 12,5 mg alone. Post-operative analgesic protocol consisted of oral oxycodone/naloxone (10 mg every 12 for 3 days+ paracetamol 1g if necessary. Oncological criteria for patients selection were: low risk prostatic cancer (PSA <10, cT1c-T2, Gleason score <7, positive core biopsy <33%), MRI negative for extracapsular extension. All patients were directely discharged to their home under the care of a family member and with integrated home nurse care for two days. Patients was descharged only if they met the following requirements: absence of complication, dreinage debit less than 100 ml, normal oral tolerance and good functional recovery.

Results:

Mean patients age was 63 years. Mean operative time was 118 minutes and estimated blood loss was 245 mL. 7/8 patients were successfully discarged the day after surgery. One patients had a prolonged lenght of stay for persistent haematuria.
Satisfaction was unanimously high in all patients surveyed.

Discussion:

early hospital discharge of patients who underwent open seminal-nerve sparing radical prostatectomy is feasible and safe. With Erbeject 2 use is possible to performe minimaly invasive radical prostatectomy, reducing the risk of blood loss.
Conclusions: We belive that day surgery open prostatectomy is a good option for selected patients and decrease overall healthcare costs.

12. Chirurgia Di Salvataggio Nella Ripresa Di Malattia In Cap Dopo Terapia Primaria

G. Cucchiarale[1], G.L. Milan[1], F. Valentino[1], U. Ferrando[1]

[1] Clinica Cellini - Humanitas (Torino)

La ripresa biologica di malattia nel CaP è un problema sempre più frequente nella popolazione maschile già sottoposta a trattamento primario. Il trattamento primario può essere rappresentato da : prostatectomia radicale +/- linfoadenectomia (tecnica open, laparoscopica, robotica), RT,HIFU, terapia ormonale. Questi percorsi possono essere "complicati" da ripresa biologica . Possiamo focalizzare in modo fedele la sede della secondarietà oncologica con TC-PET colina, RM prostatica, biopsia eco/RM guidata . La localizzazione dei foci metastatici, può permettere ulteriori percorsi di chirurgia "radicale" di salvataggio.
Questa chirurgia deve essere vissuta come terapia di "contenimento dinamico" della patologia oncologica per procrastinare il più possibile l'inserimento del paziente in percorsi terapeutici di palliazione. Dal 2007 abbiamo attivato questa chirurgia in 27 pazienti con ripresa biologica di malattia, innalzamento dei valori di PSA e ipercaptazione alla TC PET, alcuni già ormonorefrattari. E' stata eseguita PR di salvataggio (se non precedentemente eseguita), linfoadenectomia estesa (linfonodi pelvici, presacrali, iliaci, paraortici, paracavali fino all'ilo renale). In alcuni casi l'es.istologico ha documentato malattia metastatica anche in sedi non evidenziate alla TC-PET. Considerando l' azzeramento o l'abbattimento del PSA quale evidenza di controllo della malattia neoplastica, questa chirurgia ci ha fornito buoni risultati. In tutti i pz si è verificato un immediato azzeramento/abbattimento dei valori di PSA mantenuto tale, per tutti i pazienti per un minimo di 9 mesi. Abbiamo quindi assistito, in maniera variabile, ad un diversificato andamento della malattia. 3 pazienti sono liberi da malattia a 7 anni. 3 pazienti a 5 anni. Questa chirurgia di salvataggio non deve essere interpretata come terapia in grado di far guarire il paziente,ma come un debulking oncologico con un possibile potenziale miglior controllo della malattia.

Lunedì 25 maggio

Sala A

15:30 -17:30

Video 5

Laparoscopia a 360°

Moderatori:
Michele Amenta
Matteo Spagni

1. Clampless Laparoscopic Partial Nephrectomy For Hilar Tumor

R. Sanseverino[1], O. Intilla[1], U. Di mauro[1], G.. Molisso[1], T. Realfonso[1], G. Lubrano[2], G. Napodano[1]
[1] Ospedale Umberto I - ASL Salerno, U.O.C. Urologia (Nocera Inferiore)
[2] Ospedale Umberto I - ASL Salerno, U.O.C. Anestesia e Rianimazione (Nocera Inferiore)

Video shows a case of a clampless LPN for the treatment of hilar renal tumor. A 65 years old male presented at our institution with hilar tumor of left kidney (55mm). Renal score was 11h and C index was 1.2. A transperitoneal approach was performed and hilar vessels are prepared in event that bulldog clamping may subsequently be needed. Intraoperative monitoring includes also BIS monitor™ and NICOM. A controlled hypotension is maintened at approximately 60 mmHg. The renal lesion is excised using Ligasure™. Calyceal suture was performed with Monocryltm. Renal parenchyma was repaired with Vicryl™ sutures arrested with absorbable clips and Hem-O-lok™. Hemopatch and Floseal were applied to resection bed. BMI, ASA score and tumor size were 26, II and 55mm, respectively. Operative time, blood loss, ΔHb were 185 min, 400 ml, 2.8 gr/dl, respectively. No transfusion was required. The procedure was performed without clamping. Hospital stay was 6 days. No postoperative complications occurred. Histological evaluation revealed RCC pT1b, Furhman 2 with negative surgical margins. Clampless laparoscopic partial nephrectomy represents a safe and reproducible technique that allow to sparing renal parenchyma and preserve renal function also in challenging case as hilar tumor.

2. Reimpianto Ureterale In Neovescica Ortotopica Per Via Laparoscopica

G. Zarrelli[1], F. Fontana[1], M. Iannucci[1], G. Cipollone[1], G. Mastroprimiano[1], M. Sala[1], L. Apice[1], D. Paolinelli[1], F. Sereno[1]
[1] Ospedale S. Andrea (Vercelli)

La stenosi dell'anastomosi uretero-ileale rappresenta un'evenienza che si verifica, secondo le casistiche presenti in letteratura, nel 4-20% dei pazienti sottoposti a cistectomia con confezionamento di neovescica ileale ortotopica. Presentiamo il caso di un paziente monorene chirurgico con stenosi dell'anastomosi uretero-ileale sinistra, comparsa dopo circa 10 mesi dall'intervento di cistectomia + nefroureterectomia laparoscopica. Attraverso il tramite della nefrostomia posizionata in precedenza, si è proceduto ad ureteroscopia flessibile anterograda, evidenziando una stenosi invalicabile dell'uretere a livello dell'anastomosi uretero-ileale. Nell'impossibilità di procedere ad una ricanalizzazione per via endoscopica si è proceduto ad un reimpianto ureterale con approccio laparoscopico. Dopo lisi di aderenze intestinali si è proceduto all'identificazione della neovescica utilizzando come riferimento la luce del cistoscopio flessibile e ad identificazione del tratto stenotico dell'uretere utilizzando come riferimento l'ureteroscopio flessibile. Quindi si è proceduto a sezione del tratto di uretere stenotico con riconfezionamento dell'anastomosi uretero-ileale su stent doppio J. L'utilizzo di ureteroscopio e cistoscopio flessibile ha consentito una più rapida identificazione dell'uretere sinistro e della neovescica nel contesto delle aderenze, limitando l'estensione della viscerolisi e riducendo la durata dell'intervento.

3. Laparoscopic Management Of A Left In Situ Calcified Double J Ureteral Stent And A 2 Cm Ipsilateral Kidney Tumor

L. Silvestri[1], A.L. Pastore[1], S. Al Rawashdah[1], Y. Al Salhi[1], A. Leto[1], G. Palleschi[1], A. Carbone[1]
[1] Università "La Sapienza" di Roma, Facoltà di Farmacia e Medicina, Dipartimento di Scienze e Biotecnologie Medico-Chirurgiche, U.O.C. Urologia (Latina)

In this video we present a case of a 60 y.o. Caucasian male with a forgotten calcified double J ureteral stent, positioned 14 months ago in other department. A totally endoscopic resolution failed and only the cystolithotripsy with the detachment of the distal portion of the stent has been performed. A new double J stent has been placed to ensure the kidney drainage. While a previous x-ray examination didn't show the encrusted double J stent, a CT scan showed the calcified upper loop of the old stent, the second double J stent plus the presence of two ipsilateral pelvic stones and a 2 cm polar inferior ipsilateral right incidental renal tumor. The right renal pelvis was dissected, isolated and incised with a cold blade. The stent with 2.3 cm x 1.5 cm stone on the proximal tail was removed with the two ipsilateral stones. The incision was closed longitudinally with 3-0 absorbable-barbed running suture. The zero ischemia enucleation of the ipsilateral tumor was performed. The patient was discharged on postoperative day 3. Endoscopic cystolithotomy combined with laparoscopic pyelolithotomy can be performed safely and successfully to remove the encrusted ureteral stent.

4 . Nefroureterectomia Laparoscopica En Bloc

G. Zarrelli[1], M. Iannucci[1], F. Fontana[1], G. Mastroprimiano[1], G. Cipollone[1], M. Sala[1], L. Apice[1], D. Paolinelli[1], F. Sereno[1]
[1] Ospedale Sant'Andrea (Vercelli)

Il trattamento laparoscopico delle neoplasie dell'alta via escretrice è tuttora argomento di dibattito, soprattutto per quanto riguarda la tecnica di resezione della pastiglia vescicale perimeatale ed il rischio di insemenzamento

del campo operatorio con cellule neoplastiche. Presentiamo un approccio laparoscopico all'intervento di nefroureterectomia destra con asportazione "en bloc" del pezzo operatorio. Il paziente viene posizionato in decubito laterale sul fianco sinistro. Con tecnica open si posizionano il trocar di Hasson e tre trocars operativi. Si procede a nefrectomia destra con utilizzo di Hem-o-lok sugli elementi del peduncolo renale. L'uretere viene isolato fino ai vasi iliaci. Viene modificata la posizione del paziente ponendolo in decubito supino. Con l'ausilio di due ulteriori trocar da 10 mm si isola l'uretere fino ad apprezzare i fasci del detrusore, si procede quindi ad isolamento e mobilizzazione della porzione perimeatale della vescica fino ad ottenere una "conizzazione" dell'area interessata. In tale sede viene posizionata suturatrice meccanica angolabile con la quale si seziona la pastiglia vescicale. Il pezzo operatorio viene posizionato in endobag ed estratto da una incisione pararettale di circa 6 cm. L'utilizzo di suturatrice meccanica ha consentito l'asportazione del pezzo operatorio en bloc, senza apertura della via escretrice e contaminazione del campo.

5. Nefroureterectomia E Diverticulectomia Vescicale En Bloc Per Via Laparoscopica In Tcc Della Via Escretrice Superiore Ed Endodiverticolare

G. Zarrelli[1], M. Iannucci[1], G. Mastroprimiano[1], F. Fontana[1], G. Cipollone[1], M. Sala[1], L. Apice[1], D. Paolinelli[1], F. Sereno[1]
[1] Ospedale Sant'Andrea (Vercelli)

Presentiamo il caso di un paziente con neoplasia uroteliale della via escretrice superiore sinistra (pelvi ed uretere lombare) ed endodiverticolare (diverticolo vescicale di circa 4 cm della parete postero-laterale sinistra con colletto perimeatale). La sede del diverticolo, vicino al decorso dell'uretere pelvico sinistro e del colletto diverticolare prossimo al meato ureterale, ha consentito di effettuare l'asportazione "en bloc", per via laparoscopica, di rene ed uretere sinistro, diverticolo vescicale ed una pastiglia vescicale comprendente meato ureterale e colletto diverticolare. Viene posizionato come repere, per via trans-uretrale, il loop di uno stent mono-J 7 ch all'interno del diverticolo. Con il paziente posizionato in decubito laterale sul fianco destro si esegue la nefrectomia sinistra e si isola l'uretere fino ai vasi iliaci. Viene modificata la posizione del paziente ponendolo in decubito supino. Con l'ausilio di due ulteriori trocar da 10 mm si isola l'uretere fino alla parete vescicale, si procede quindi ad isolamento del diverticolo e della porzione di detrusore intorno al meato ureterale e al colletto diverticolare. Con una suturatrice meccanica angolabile si seziona la pastiglia vescicale comprendente il meato ed il colletto diverticolare. L'intero pezzo operatorio, può essere così asportato in blocco, senza apertura della via escretrice e contaminazione del campo

6. Ureteropieloplastica Destra Laparoscopica In Rene Pelvico A Ferro Di Cavallo

A.. Polara[1], L. Aresu[1], S. Grosso[1], G. Grosso[1]
[1] Casa di Cura Pederzoli (Peschiera del Garda)

Descriviamo il trattamento laparoscopico di un raro caso di stenosi del giunto pieloureterale destro in paziente di sesso femminile di 40 anni affetta da rene ectopico pelvico a "ferro di cavallo", diagnosticato mediante URO-TC in seguito a coliche renali recidivanti. L'accesso adottato per tale procedura transperitoneale, si è avvalso della disposizione di 4 trocars "a diamante" tipico della chirurgia pelvica, con la paziente disposta in posizione supina. L'accesso anteriore al rene pelvico è stato possibile per la completa anteriorizzazione della pelvi renale. Il video descrive l'incisione del peritoneo posteriore e l'accesso alla pelvi del rene, ectasica con uretere anteriore. E' descritta l'incisione della pelvi renale e lo spatulamento dell'uretere, indi una plastica non dismembered ureteropielica con stenting ureterale anterogrado intracorporeo. La procedura è stata seguita da isterectomia semplice per fibromiomatosi uterina, mediante i medesimi accessi della pieloplastica. La durata dell'intera procedura è stata di 150 minuti, le perdite ematiche sono state di circa 100 ml. Il catetere vescicale ed il drenaggio sono stati rimossi in terza giornata. La paziente è stata dimessa, asintomatica, in quarta giornata postoperatoria. Lo stent è stato rimosso dopo 28 giorni dalla dimissione previa pielografia ascendente.

7. Totally Intracorporeal Robot-Assisted Vescica Ileale Padovana (Vip) Using Staplers: A Stepwise Approach

R. Papalia[1], G. Simone[2], M. Ferriero[3], R. Mastroianni[3], S. Guaglianone[3], G. Muto[4], M. Gallucci[3]
[1] Università Campus Biomedico, Istituto Nazionale Tumori "Regina Elena" (Roma)
[2] Istituto Nazionale Tumori "Regina Elena", Ospedale San Giovanni Bosco (Roma, Torino)
[3] Istituto Nazionale Tumori "Regina Elena" (Roma)
[4] Università Campus Biomedico (Roma)

Introduction And Objectives:
Robotic radical cystectomy with intracorporeal neobladder reconstruction is gaining popularity. Nevertless the procedure is still considered complex and characterized by a long operative time. The video shows our step by step technique of robotic intracorporeal VIP using staplers to construct part of the reservoir.

Methods:
From August 2012 to October 2014, 91 patients underwent robotic intracorporeal VIP using staplers to construct part of the reservoir. We performed RRC, extended lymphadenectomy, and totally intracorporeal Padua neobladder. The surgical technique is shown in the accompanying video. RESULTS: Totally intracorporeal VIP was successfully performed in all 91 patients. Mean estimated blood loss was 200 ml (SD 60), median operative time (console time) was 4.2 hours (range: 4-6 hours), median time to regular diet was 6 d (range: 5–21 d), median hospital stay was 8 d (range: 6–45 d). No intraoperative complications occurred. Minor complications (Clavien grade 1-2) occurred in 27% of the patients while major complications (Clavien grade 3-5) were detected in 9% of the patients. No stones in the neobladder were observed during the follow-up.

Conclusions:
Robot-assisted orthotopic neobladder (VIP) is feasible and safe. The partially stapled neobladder we presented could shorten operative time for totally intracorporeal urinary diversion.

8. Wallace Versus Conventional Bricker Ureteroileal Anastomoses During Robot Assisted Radical Cystectomy With Totally Intracorporeal Urinary Diversion

G. Simone[1], S. Guaglianone[2], M. Ferriero[2], R. Papalia[3], R. Mastroianni[2], M. Gallucci[2]
[1] Istituto Nazionale Tumori "Regina Elena", Ospedale San Giovanni Bosco (Rome, Turin)
[2] Istituto Nazionale Tumori "Regina Elena" (Rome)
[3] Istituto Nazionale Tumori "Regina Elena", Università Campus Biomedico (Rome)

Il video mostra il confezionamento intracorporeo di un condotto ileale sec. Bricker dopo cistectomia radicale robotica. Nel video vengono mostrate due tecniche per il confezionamento delle anastomosi uretero-ileali, quella standard sec. Bricker con confezionamento di anastomosi uretero-ileali separate e quella sec. Wallace,

in cui si esegue una anstomosi ureteroureterale laterolaterale che si anastomizza successivamente al fondo del condotto ileale.

9. Laparoscopic Radical Prostatectomy With Extended Lymphadenectomy For Treatment Of High Risk Prostate Cancer

R. Sanseverino[1], O. Intilla[1], U. Di Mauro[1], T. Realfonso[1], G. Molisso[1], C. Cicalese[1], G. Napodano[1]
[1] Ospedale Umberto I - ASL Salerno, U.O.C. Urologia (Nocera Inferiore)

Laparoscopic preperitoneal radical prostatectomy (LPPRP) is a safe and reproducible technique. High risk prostate cancer requires an extended lymphadenectomy. A transperitoneal approach allows to combine mininvasive procedure with an extended lymphadenectomy. A transperitoneal approach is realized. Pelvic bilateral pelvic lymphadenectomy is performed including iliac and obturator nodes. We proceed with dissection between bladder and prostate; endopelvic fascia is opened and separated by prostate. Bladder neck is spared and urethra is cut. Dissection moves to a depth plane towards Denonvilliers fascia; deferens vas are isolated, clipped and then cut. Mobilization of seminal vesicles and incision of Denonvilliers' fascia. Section of the prostatic pedicles is realized with Harmonic Acetm . Lateral blunt dissection proceed towards prostatic apex. Urethra is cut and the prostate is placed in endobag. A water-tight urethrovesical anastomosis with running suture is performed. A transperitoneal laparoscopic radical prostatectomy allows to combine mininvasive procedure with an extended lymphadenectomy.

10 . Prostatectomia Radicale Pelvioscopica Nerve Sparing: Note Di Tecnica Dopo 3500 Procedure

A. Polara[1], L. Aresu[1], S. Grosso[1], G. Grosso[1]
[1] Casa di Cura Pederzoli (Peschiera del Garda)

Descriviamo la tecnica nerve sparing laparoscopica extraperitoneale della prostatectomia radicale eseguita ad un paziente di 62 anni, affetto da adenocarcinoma prostatico Gleason 6 (3 3), riscontrato in tre prelievi bioptici monolateralmente, con PSA 5 alla diagnosi. Il posizionamento dei trocars è eseguito con tecnica open/blind (digitogidata), senza impiego di endodissettori, viene descritto l'accesso neck sparing al pericistio posteriore per l'identificazione delle vescicole seminali, l'incisione intrafasciale della fascia endopelvica, l'accesso preliminare laterale sinistro alla fascia di Denonvilliers, la preparazione dell'apice prostatico, la sezione del collo vescicale, il trattamento dei peduncoli seminali e la sezione dei deferenti, la sezione dell'apice prostatico con preservazione uretrale, il completamento retrogrado della prostatectomia con clips hem-o-lok sui peduncoli vascolari principali, l'anastomosi running suture in monocryl 3-0. I tempi operatori sono pari a 40 minuti, le perdite ematiche 400 ml. Il drenaggio è stato rimosso in seconda giornata postoperatoria. E' stata eseguita cistografia in quinta giornata postoperatoria, e rimozione del catetere in 6 giornata. La tecnica descritta permette il conseguimento dell'early continence rate del 30% dei pazienti alla rimozione del catetere, sino all'80% ai 3 mesi, ed al 90% (dry) all'anno dall'intervento. I risultati sulla funzione erettile vengono stratificati per età (under 50-60-70).

11. Tension Free Knotless Vesico-Urethral Anastomosis During Laparoscopic Radical Prostatectomy

G. Zarrelli[1], M. Iannucci[1], F. Fontana[1], G. Mastroprimiano[1], G. Cipollone[1], M. Sala[1], L. Apice[1], D. Paolinelli[1], F. Sereno[1]
[1] Ospedale Sant'Andrea (Vercelli)

Presentiamo una tecnica di anastomosi vescico-uretrale "knotless" con utilizzo di filo V-Loc autostatico in una sutura continua bidirezionale (Van Velthoven). Utilizziamo 2 fili V-Loc che vengono uniti tra loro con un nodo a doppia asola intrecciata. La presenza di microalette sulla superficie del filo permette di mantenere la tenuta ad ogni punto impedendo al filo di retrarsi e perdere tensione. Si procede a ricostruzione di un piano muscolo-fasciale posteriore con due punti che solidarizzano il tessuto fibroso suburetrale alla parete posteriore della vescica circa 2 cm dorsalmente al collo vescicale. Successivamente si confeziona una sutura continua bidirezionale con punti "fuori-dentro" sul collo vescicale e "dentro-fuori" sull'uretra da ore 6 a ore 12. Ad ogni punto i margini vescicale ed uretrale vengono avvicinati simmetricamente senza tensione. L'ultimo punto viene posizionato bilateralmente "fuori-dentro" sull'uretra e "dentro-fuori" sul collo vescicale, in modo da mantenere gli estremi del filo sul versante vescicale. Mantenendo una pinza in contro-trazione sulla vescica possiamo trazionare i fili ed accostare adeguatamente i margini a completamento dell'anastomosi. Tale tecnica permette il confezionamento di un'anastomosi "watertight" e "tension-free" di rapida esecuzione, che consente la rimozione precoce del catetere.

12. Linfadenectomia Retroperitoneale Laparoscopica Per Neoplasia Testicolare Dopo Chemioterapia

C. Meccariello[1], M. Fedelini[1], A. Oliva[1], L. Pucci[1], G. Battaglia[1], P. Fedelini[1]
[1] AORN A. Cardarelli, U.O.S.C. Urologia (Napoli)

La linfadenectomia per metastasi linfonodali retroperitoneali da tumore del testicolo è indicata nel trattamento delle lesioni residue a chemioterapia. L'intervento open è gravato da considerevole morbidità. La linfadenectomia laparoscopica dopo CHT , tecnicamente difficile, ma molto invitante per la scarsa morbidità potenziale, non ha ancora avuto una grossa diffusione. Gli AA nel video mostrano le varie fasi dell'approccio laparoscopico. Paziente operato 8 mesi prima per neoplasia non seminomatosa maligna mista pT2. Posto in decubito laterale con fianco destro in alto ed angolazione di 90° . Viene praticato miniaccesso open con trocar di Hasson in pararettale dx; Trocar 11 sottocostale e 5 sovrailiaco sull'ascellare media. Apertura del perritoneo posteriore a destra,completa derotazione del colon destro,medializzazione del duodeno ed esposizione della cava dalla vena renale alla biforcazione. Identificata la voluminosa massa neoplastica (con estensione dalla biforcazione aortica alla vena renale) inizia la dissezione che viene "regolata" sul tessuto da asportare. Contestualmente viene asportata la vena genitale dall'anello inguinale interno all'inserzione cavale. L'emostasi viene assicurata con l'uso di bisturi bipolare o a radiofrequenza sui vasi minori e dall'apposizione di hem-o-lock sui vasi maggiori. Il decorso post-operatorio è stato regolare,non si è verificata linforrea ed il paziente è stato dimesso dopo 4 giorni.

Lunedì 25 maggio

Sala B

15:30 -18:00

Comunicazioni 4

Lungo La Trafila Urinaria

Moderatori:
La Rosa
Andrea Polara

1. The Social Media Revolution Is Changing The Conference Experience: Why Not In AURO Congress?

A. Fandella[1], E. Guidoni[1]
[1] Casa di Cura Giovanni XXIII (Monastier di Treviso)

Objective

Social media have become so integrated into modern communications as to be universal in our personal and, increasingly, professional lives. Recent examples of social media uptake in urology, and the emergence of data to quantify it, reveal the expansion of conventional communication routes beyond the in-person forum. In every domain of urologic practice, from patient interaction through research to continuing professional development, the move online has unlocked another layer of conversation, dissemination, and, indeed, caveats. Social media have a democratizing effect, placing patients, trainees, practitioners, and thought leaders in the same arena and on equal footing. If uptake of social media in medicine even remotely parallels its rise to ubiquity in other areas, it will only expand and evolve in the coming years.

Materials and Methods

Twitter activity was noted at all eight conferences in 2013. In all, 12 363 tweets were sent generating over 14 million impressions. The number of participants tweeting at each meeting varied from 80 (Congress of the Société Internationale d'Urologie, #SIU2013) to 573 (the American Urological Association, #AUA13). Overall, the AUA meeting (#AUA13) generated the most Twitter activity with >8.6 million impressions and a total of 4663 tweets over the peri-conference period. It also had the most impressions and tweets per day over this period, at 717 000 and 389, respectively. The EAU Annual Congress 2013 (#EAU13) generated 1.74 million impressions from a total of 1762 tweets from 236 participants. For trends in Twitter use, there was a very sharp rise in Twitter activity at the EAU Annual Congress between 2012 and 2014. Over this 3-year period, the number of participants increased almost 10-fold, leading to an increase in the number of tweets from 347 to almost 6000. At #EAU14, digital impressions reached 7.35 million with 5903 tweets sent by 797 participants.

Results

Interprofessional Networking Expansion of professional network, within and outside specialty Enhanced clinical care through case discussion, create New opportunities for academic collaboration. Give us access to communication with key opinion leaders. There were 3 categories of interest of Twitter in the field of urology: spread of scientific knowledge, scientific interaction during medical conferences and medical education and international medical debates. The unique spread of evidence-based-medecine through traditional scientific journals in paper version is over. Main scientific journals in urology and scientific societies are now using a Twitter account and became virtual. They use new bibliometrics available on #SoMe to estimate the social impact. Twitter allows for a better interactivity of doctors attending scientific conferences. Exponential use of Twitter is in the interest of speakers and leaders, audience and scientific societies. Lastly, medical academic education and continuing medical education can be achieved through #SoMe. Twitter became a lively virtual platform for scientific debates for complex oncological cases (dematerialized tumor board). Twitter is also a place for intense scientific discussion during virtual journal club without geographic or timeline restriction.

Discussions

Social media have become so integrated into modern communications as to be universal in our personal and, increasingly, professional lives. In each domain of urologic practice, from patient interaction through research to continuing professional development, the move online has unlocked another layer of conversation, dissemination and, indeed, caveats.

Social media have a democratizing effect, placing patients, trainees, practitioners, and thought leaders in the same arena and on equal footing. If uptake of social media in Social media have a democratizing effect, placing patients, trainees, practitioners, and thought leaders in the same arena and on equal footing. If uptake of social media in medicine even remotely parallels its rise to ubiquity in other areas, there is certain to be further expansion of its roles as described above, and novel uses will certainly continue to emerge. For these reasons, urologists should be aware of these technologies, as none is likely to be spared their impact in the future.

Conclusion

Urological conferences, to a varying extent, have adopted social media as a means of amplifying the conference experience to a wider audience, generating international engagement and global reach. Twitter is a very powerful tool that amplifies the content of scientific meetings, and conference organisers should put in place strategies to capitalise on this. Twitter is a social media web site created in 2006 that allows users to post Tweets, which are text-based messages containing up to 140 characters. It has grown exponentially in popularity; now more than 340 million Tweets are sent daily, and there are more than 140 million users. Twitter has become an important tool in medicine in a variety of contexts, allowing medical journals to engage their audiences, conference attendees to interact with one another in real time, and physicians to have the opportunity to interact with politicians, organizations, and the media in a manner that can be freely observed. There are also tremendous research opportunities since Twitter contains a database of public opinion that can be mined by keywords and hashtags. This article serves as an introduction to Twitter and surveys the peer-reviewed literature concerning its various uses and original

studies. Opportunities for use in ophthalmology are outlined, and a recommended list of ophthalmology feeds on Twitter is presented. Overall, Twitter is an underutilized resource in italian Urology practice and has the potential to enhance professional collegiality, advocacy, and scientific research.

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2. The Laparoscopic Advanced Skill Training (Last) Score System: A Simple And Useful Tool To Evaluate Urological Laparoscopic Skills During A Live-Animal Training Program

S. Ricciardulli[1], Q. Ding[2], M.. Spagni[1], S. Spatafora[1], A. Celia[3], F. Bergamaschi[1]

[1] **Arcispedale Santa Maria Nuova, Divisione di Urologia (Reggio Emilia)**

[2] **PLA General Hospital, Department of Urology (Beijing)**

[3] **Ospedale San Bassiano, Divisione di Urologia (Bassano del Grappa)**

Objective

Laparoscopic surgery training systems, ranging from bench top box trainers to virtual-reality (VR) simulators (dry-lab), even more to live animal models (wet-lab), have played an important role on residents training. Many authors suggest that proficiency-based training is the best method for residents to approach in laparoscopic skills with laparoscopic simulators. Moreover, some authors have demonstrated that live animal models are the most important training methods for surgeons who want to master the advanced techniques, to develop new surgical techniques and to improve procedures used less frequently in daily practice. Ethical and costs considerations have markedly reduced the use of live animals for teaching. Independently from models, the important aspect for trainees is to ensure that they have acquired basic skills and advanced techniques following validated criteria, and could transfer them into real operative theatre. As reported by British Associations of Urological Surgeons (BAUS), to learn laparoscopic skills the important steps that a laparoscopic novice should complete are: dry-lab courses, animal-based courses, watch live procedures, attending in a high volume center, identify a mentor and start practicing laparoscopic nephrectomy under the supervision of a mentor. After the novice has completed these important steps, his laboratory experience could be transfer to live surgery. In this sense, it would be rational to assume that a high fidelity anesthetized animal, would be superior in terms of training outcomes to a synthetic model. We developed a new score system for a live-animal training procedure. Aim of this study was to introduce the Laparoscopic Advanced Skill Training score system and to evaluate the progression of urologic surgeons in basic and advanced laparoscopic skills during a live-animal training program.

Materials and Methods

The LAST system consists of two checklists (technique and quality) and the total score is 100 points. The technique checklist has 4 categories: needle grasping, suturing, knotting and cutting. Each category has 2 columns, basic skills and instruments controlling. Based on the number of errors (errors≥ 3 0 points errors= 2, 1 point , errors≤1 2 points), the technique score is assigned. The quality score checklist has 2 columns, which are knot and anastomosis quality. The score is based on the quality ratio of 2 columns. For example, in a stomas with 12 stitches, the trainee completed 3 perfect stitches, the other stitches have visible gaps, the ratio is ¼, and the score is 0. The quality score is given, so the total score is 100 points.This was a double-blinded, prospective, non-randomized study. This study was approved by the Chinese Peoples` Liberation Army (PLA) General Hospital Ethics Committee. Trainees were divided into three groups based on their previous laparoscopic experience: novice (had no experience), junior (completed a basic dry-lab training course, could finish suturing with a surgical knot within 5 minutes), senior (finished 2 rounds live-animal training and performed 2 laparoscopic procedures as main surgeon under the supervision of a mentor). The study protocols and the LAST system were explained to all the trainees and informed consents were obtained.All procedures were recorded by digital video and properly saved for future analysis. The anastomotic stomas were cut off after procedures were done, then labeled. Two investigators were therefore blinded to the trainee's identity and assigned the LAST score.To objectively reflect the actual training level, the mean time taken and LAST score of the First Three Procedures (FTP) and Last Three Procedures (LTP) of 12 consecutive procedures in all groups were evaluated.

Results

Between August and December 2013, 48 postgraduate students and fellows were enrolled in this 36 days course. 25% (12 of 48) entered in the novice group, 50% (24 of 48) in the junior group and 25% (12 of 48) in the senior group. In time taken to complete the ureteroureterostomy between the FTP and LTP the novice (p-value=0.001), junior (p-value<0.001) and senior (p-value=0.001) presented significantly differences. The total LAST score between the FTP and LTP was significant different in each group, for the novice ($p<0.001$), for the junior ($p<0.001$), for the senior ($p=0.005$), respectively. Mann-Whitney U test showed differences in time taken between groups. There was significant difference between LTP of novice and FTP of junior ($p=0.026$), but there was no significant difference between LTP of junior and FTP of senior in time taken ($p=0.097$). There was no significant difference between LTP of novice and FTP of junior in LAST score ($p=0.499$). Conversely, there was significant difference between LTP of junior and FTP of senior ($p=0.023$) (Fig 2). The learning curves were very steep in novice (Fig 3 A) and junior (Fig 3 B), but very stable in senior (Fig 3 C). The novice learning curve was very steep in technique checklist, but low in quality score. The junior presented a significative progression in all LAST categories along the 12 procedures. As shown, the learning curve was stable for senior group. The inter-rater reliability for the time taken and checklist score was excellent with Cronbach's $\alpha=0.991$, ICC $=0.905$, $\alpha=0.992$, ICC$=0.910$, respectively. All trainees found the LAST score system simple and helpful to approach in the live animal course. According to the questionnaire survey, the novice and junior groups considered this training program very helpful to learn laparoscopic surgery. The senior group wanted to transfer his ability to the real surgery.

Discussions

New criteria should be validated objectively, validly and reliably [12]. The results of this study validated the face, content and construct validity of the newly designed LAST system for live-animal laparoscopic training. All the items of LAST system were based on real operation and designed for theoretical and manual techniques (face validity). We introduced the items correlated with training procedures (construct validity). The items of LAST were easy for trainees to assess the experience level by themselves in live-animal training (content validity). Residents who received concrete information related to a specific skill goal would be able to direct their practice and improve their performance. The evaluation of the errors occurred during the procedure and the quality of the stomas permitted the trainee a better analysis of the learning curve progression. Based on improvement of laparoscopic training, several validated training programs with standardized checklists were reported. In 2008, a pan-European study [8] assessed the relationship between the laparoscopic suturing task score and the year of resident training during a hands-on training course. Recently, a Program for Laparoscopic Urological Skills (PLUS)

[13-14], was developed and validated by a panel of experts in laparoscopic procedures. In 2011, the PLUS was introduced as a pilot final-year urologic resident examination [15]. Moreover, the European Basic Laparoscopic Urologic Skills (E-BLUS) examination consisted of five tasks: peg transfer, pattern cutting, knotting, clip and cut, and needle guidance. Aim of this program was to evaluate bimanual dexterity, hand-eye coordination, spatial cognition, suturing technique, clipping and cutting skills. The results of the E-BLUS showed that the majority of residents did not pass the tasks due to the strict criteria [15]. The results of the questionnaire revealed that overall training experience was limited and that most participants had not trained prior to the examination. Also, final-year residents in urology appeared to have limited exposure to actual laparoscopic procedures. In brief, the authors recommended to improve laparoscopic training programs. In contrast with this two training program the LAST score system introduce several important aspects to learn laparoscopic skills.First, it was scored by the mean points of the FTP and LTP, which reflected the objective outcomes of the course, and better than a single performance. Second, it was based on the number of errors of the procedures and quality ratio of the stomas. In this way, the trainees could "touch with their hands" on the progression of their learning curve.

Conclusion

Our data demonstrated that live animal training is important for trainees who have gained the basic techniques to acquire advanced skill-based, rule-based, and knowledge-based behavior than the obvious benefits of simulator, live-animal training program represents the important step to acquire advanced skills for young urologists. We introduced a new score system to evaluate laparoscopic training skills. This study enriches urologic residents and young urologists that solid laparoscopic experiences are important for translating into real arena, even for robotic surgery. Our findings support the reliability and validity of LAST system.The LAST score simple is a simple and useful tool to evaluated the laparoscopic learning curve.

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3. Nonoperative Treatment Of Renal Trauma: Our Experience

C. Mazzariol[1], F. Di Tonno[1], B. Vezzu'[1], M. Rosada[1], F.. Merlo[1]

[1] Ospedale dell'Angelo ULSS 12 (Mestre)

Objective

We present our experience regarding 19 patients (pts) with renal trauma treated at our Centre; only one of them was subjected to surgical exploration. Both our results and a brief review of literature seem to confirm the soundness of our "hands-off" policy.

Materials and Methods

We retrieved the files of 19 pts (18 males, one female) treated from January 2008 to December 2014 at our Hospital. They are not all cases observed in the aforementioned time span: since our Hospital is a tertiary referral centre, not all cases of renal injury were directly referred to the department of surgery and/or not all of them were retrievable, owing to different archiviation methods in the various departments.

The cases were staged, according to the American Association for Surgery of Trauma (AAST), as follows: grade I trauma, one; grade II, 6; grade III, 11; grade IV, one. CT scan was performed in all cases.

Results

The age range as 10-85 years (mean: 44). 14 pts had a politrauma (skull injury or liver trauma or orthopaedic fractures); for 4 of them admission to the local Intensive Care Unit (ICU), owing to the severity of the clinical situation, was necessary. The causes of trauma were: motor vehicle accidents (16), falls from height (1), domestic accident (2),stab wound (1). Pleural effusion was found in 7 pts. Only one pt underwent surgical exploration and repair because of progressively expanding retroperitoneal haematoma and anemization with acute abdominal pain. 4 patients underwent arterial embolization (AE) with metallic coils; one pt with urinary extravasation was treated with ureteral stenting; one case of renal artery dissection was treated by means of a metallic stent. Blood transfusions were necessary in 8 pts. No significant complication was reported at a follow-up based on thoracoabdominal CT scan, ultrasonography and renal scintigraphy.

Discussions

Renal injuries occur in approximately 8-10% of blunt or penetrating abdominal trauma, and most of them are defined as minor ones (1). Proper and timely diagnosis based on imaging techniques is of the utmost importance: any delay in the diagnosis can defer effective treatment and significantly increase the risk of morbidity and mortality. Acute kidney injury is associated with unfavourable outcomes ad higher mortality. AE was proved to be a reliable and efficacious method in the management of high grade renal trauma; therefore, conservative treatment , if possible, is the treatment of choice(3). Complications occur in a wide – from 3% to 33% – range of cases (1). Early complications occur usually in four weeks and include: urinary extravasation or urinoma, delayed bleeding, infected urinoma, development of perinephric abscess, sepsis, pseudoaneurysm, artero-venous fistula and hypertension. Late complications include hydronephrosis, hypertension, calculus formation or chronic pyelonephritis.

In our experience late complications were not observed. Even in the presence of severe associated injuries requiring surgical exploration, pts with AAST grade I-III renal injury can be treated by means of a conservative strategy

safely and effectively.
Patients with primary conservative treatment of blunt kidney rupture seem to need less surgery, and loose less blood and renal parenchyma than patients surgically treated (3). Moreover, posttraumatic hypertension rates are not higher than in a similar control population, irrespectively of the type of treatment adopted.

Conclusion

Therapy of renal trauma has evolved in the last years from mainly surgical to predominantly conservative treatment. Multimodality treatment is nowadays an effective alternative to surgery in clinically stable patients. Stenting of the urinary tract is highly effective in the treatment of the cases presenting with urinary extravasation. AE is an effective treatment in the great majority of significant arterial bleeding and save patients from unnecessary exploration and loss of functioning renal parenchyma (2,4,5); its use should probably not be restricted by fear of worsening renal function (5). Our experience seems to confirm the effectiveness of our "hands off" policy and, more generally, the widespread trend toward conservative treatment: a non operative strategy must be nowadays considered as a valid and reasonable option for the majority of minor penetrating renal injuries as well as in many selected high-grade injuries.

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4. Annexin A3 Involvement In Lipid Storage Of Clear Cell Renal Cell Carcinoma (Ccrcc) Cells

C. Bianchi[1], S. Bombelli[1], C. Meregalli[1], B. Torsello[1], G. Bovo[2], P. Viganò[3], G. Strada[3], R.A. Perego[1]
[1] **Università Milano-Bicocca, Dipartimento di Scienze della Salute (Monza)**
[2] **Ospedale San Gerardo, U.O. di Patologia (Monza)**
[3] **Ospedale Bassini, Cinisello Balsamo - A.O. ICP- U.O. di Urologia (Milano)**

Objective

Renal cell carcinomas (RCC) account for about 85% of renal cancers and are characterized by different subtypes with different incidences. Clear cell RCC (ccRCC) is the most frequent subtype and is characterized by cells with clear cytoplasm due to lipid and glycogen storage. 90% of sporadic ccRCCs is characterized by biallelic inactivation of von-Hippel Lindau (VHL) gene that prevents degradation of hypoxia-inducible factor 1a and 2a (HIF1a/HIF2a) proteins with constitutive activation of their function [1]. HIF1 and HIF2, through the regulation of different and specific hypoxia-inducible genes, have an important role in the development of various metabolic alterations [2] responsible also of the "clear" cytoplasm that characterizes the cells of this tumor. Gene expression profiling and pathway analysis of early stage ccRCCs identified a molecular signature, involving PPARa/g modulation and lipid storage proteins, consistent with an adipogenic differentiation in ccRCC that can explain its "clear cell" morphology due to lipid accumulation in cytoplasm [3]. Interestingly, inhibition of ccRCC cell growth has been obtained by in vitro targeting PPARa pathway [4], evidencing that the adipocyte-like signature of ccRCC cells may be used to develop new therapeutic approaches. Annexin A3 (AnxA3) protein, described as biomarker in lung adenocarcinoma, prostate and ovarian cancer [5] and involved in the enhancement of the transactivating activity of HIF-1 [6], has been recently described also involved in inhibition of adipocyte differentiation [7]. Interestingly, we previously observed a HIF-related down-regulation of AnxA3 and a different pattern of its 36 and 33 kDa isoforms in human RCC respect to normal cortex cells [8]. By cytological, molecular, and functional approaches here we aimed to investigate AnxA3 involvement in adipocyte-like phenotype of ccRCC cells for potential translational approaches.

Materials and Methods

Primary cell cultures, established from ccRCC and normal cortex tissue samples were characterized by FACS analysis. Caki1 and A498 ccRCC cell lines and HK2 primary tubular cell lines were also used. Adipogenic medium was obtained by addition of 10ug/ml insulin, 0.25 uM dexamethasone and 0.5 mM IBMX to standard culture medium. Lipid storage in cultures and corresponding tissues was evaluated by Oil Red "O" staining or by FACS and immunofluorescence analysis with the fluorescent marker Bodipy. AnxA3 and PLIN2 expression was evaluated by western blot and immunofluorescence analysis, and gene silencing was performed by siRNA. Cell viability was evaluated by MTT assay.

Results

ccRCC cultures maintain at the first passage the lipid storages observed in corresponding tissues. In ccRCC primary cultures AnxA3 expression was significantly down-regulated and PLIN2, a lipid droplet protein marker, significantly up-regulated respect to normal cortex. Moreover, in ccRCC primary cultures and cell lines, a lower expression of the 36 kDa isoform of AnxA3 protein correlated with a more abundant lipid storage. HIF1a-positive ccRCC Caki1 cell line, characterized by a lower expression of 36kDa AnxA3, and HIF1a-negative A498 and HK2 cells, characterized by a higher expression of 36 kDa AnxA3, were treated for 8 days with a specific medium known to induce adipocyte differentiation [7]. Caki1 cells, but not A498 and HK2 cells, showed an increase of lipid storage. Of note, in Caki1 cells treated with the adipogenic medium we observed a further decrement of 36 kDa AnxA3 protein level. Preliminary data showed that AnxA3 silencing induces an increase of lipid storage also in A498 cells, with a decrease of cell viability.

Discussions

Our data show that primary cell cultures maintain the metabolic phenotype of ccRCC tissues and thus are a reliable model to study the metabolic alterations and the molecular mechanisms responsible of the "clear" cytoplasm of ccRCC cells. Using ccRCC primary cell cultures and cell lines we evidenced an involvement of AnxA3, and in particular of its 36 kDa isoform, in the modulation of lipid storage that characterizes the "adipocyte-like" phenotype of these tumor cells. In particular, our data seem to evidence for AnxA3 a role of negative regulator of lipid accumulation in ccRCC. The described calcium-dependent phospholipid-binding capacity of AnxA3 might have a role in modulating lipid accumulation in ccRCC lipid droplets that are lined by a phosholipid monolayer of cells.

Conclusion

These data may help to shed light on the complex molecular mechanisms involved in metabolic reprogramming of ccRCC. The comprehension of these molecular mechanisms may also help to identify new putative therapeutic targets for this cancer that nowadays is still poorly treatable. Moreover, the correlation here described between 36

kDa AnxA3 level and lipid storage in ccRCC cells may open the possibility to use AnxA3 as diagnostic/prognostic target in ccRCC, since it has been described in literature [9; 10] that AnxA3 may be secreted from different types of cancer cells (like prostate and ovarian cancer cells) and assayed in patients' biological fluids.

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5. ADULT MULTICYSTIC NEPHROMA: A CLINICL CASE AND REVIEW OF LITERATURE

C. Grassani[1], M. Potenzoni[1], N. Uliano[1], A.M. Pieri[1], D. Martines[1], S. Destro Pastizzao[1], R. Arnaudi[1], A. Savino[1], A. Prati[1]

[1] Ospedale di Vaio (Fidenza)

Objective

Cystic renal neoplasms constitute a broad and various category of disorder, ranging from benign indolent to aggressive neoplasm. The spectrum of renal cystic lesions includes: multilocular cystic nephroma, multilocular cyst renal cell carcinoma, renal cell carcinoma with cystic change, Wilm's tumor and hydronephrotic kidney. The differential diagnosis is often challenging and the radiologic report is not always sharply diriment. Muliticystic nephroma (MN) is a rare benign cystic lesion of the kidney, originally described in 1892, since then, about 200 cases were reported in literature. It shows a bimodal distribution with a first peak incidence in 24 months old male children and another one in women over 40 years old. Its etiology is still uncertain.

The non-specific clinical findings and the poor contribution of imaging studies, make the surgical intervention the effective method to exclude a malignant cystic lesions of the kidney.

Materials and Methods

A 32 years old healthy female was admitted to our Operative Unit for evaluation of not specific urinary tract symptoms and intermittent left flank pain, without fever or other systemic symptoms. Personal and familial history were negative for neoplasm, urinary stone or other significant urologic disease. Her physical examination was unremarkable, except for a mild knocking pain at the left flank. Abdominal ultrasonography (US) revealed a voluminous complex cystic mass at the medium-lower pole of the left kidney. The computed tomography (CT) showed a 13×15 cm pluriconcamerated cystic mass occupying the medium-lower pole of the kidney. The fluid filled cysts were separated by septations with variable contrast enhancement, mild delayed contrast, occasional periseptal calcifications and hypotropfic arterial vessels. Not solid areas were founded. The well-demarcated mass showed an extensile growth, protruding in the renal sinus and reaching the omolateral iliac fossa, strictly in contact with the left colon. A few lymph nodes with increased volume were described.

Results

A left radical nephrectomy with lombothomic access was performed. The surgical specimen was sent to the Histopathology Unit. Macroscopic examination of the surgical specimen revealed a 14x13x9 cm tumor mass. Cut section was constituted of a multilocular cystic lesion composed of numerous not communicating fluid filled cyst of various dimensions, separated by thin to thick fibrous septa. The microscopic specimen revealed a mixed stromal and epithelial neoplasm with a fibroblastic-myofibroblastic, edematous and hypocellular stroma and few adipocytes. No mesenchimal blastematous or clear cell components were found. The cysts were lined by a variable epithelium from flat to columnar, with also hobnail cells in some areas. The final diagnosis was of an adult cystic nephroma.

Discussions

Muliticystic nephroma (MN) is a rare benign, non-familial, cystic lesion of the kidney. It was firstly described in 1892, since then, about 200 cases were reported in literature. The pathogenesis of MN is controversial and its classification confused. There are numerous theories about its etiology as a developmental defect. Some authors hypothesize that cystic nephroma, like the pleuropolmonary blastoma of the lung, represents a spectrum of abnormal renal organogenesis with risk for malignant transformation, based on study on DICER1 mutations in particular in children. In general, MN is considered to be a segmental form of renal dysplasia related to polycystic disease or alteration of the growth of the ureteric bud. It is also regarded as a neoplasm, occurring at the benign end of the wide spectrum of a continuum. According to the World Health Organization (WHO) classification of renal neoplasm, MN is grouped in the mixed epithelial and stromal tumors (MEST) [bons] MN has a bimodal age distribution, being reported both in children both in adults. It is more common in infant age between 2 and 4 years. In this group it displays a major incidence in male: 73%. In adult age it is especially seen in 4st-6st decade, affecting predominantly female: M:F=1:8. Abdominal mass is common onset in children while abdominal flank pain, abdominal discomfort, hematuria and recurrent urinary tract infections are usually findings in adults. Most patients are asymptomatic and tumors discovered incidentally during routine examinations or radiological investigations. The CT and magnetic resonance imaging findings are suggestive for an encapsulated, multilocular cystic fluid filled mass with variable contrast enhancement of septa. Being the radiologic report not always sharply diriment, and the clinical data not specific, the differential diagnosis is often challenging, as in the case we presented. Boggs and Kimmelstiel formulated first diagnostic criteria of a multilocular cyst in 1951 and later modified in 1956 [bogss]. They included: a multilocular mass, cyst lined by epithelium, non communications between cyst or between cyst and the renal pelvis, no normal nephron in the septa, remaining parenchyma essentially normal. Joshi and Bechwith modified these criteria in 1989. The new terminology emphasized the neoplastic rather than the developmental origin. This new version specified that: the tumor is entirely composed of cysts and septa in a well demarcated mass, septa are the only solid components, the cysts are lined by cuboidal to flattened epithelial cell, or hobnail epithelium, septa contain fibrous tissue, in which well differentiated tubules may be present. Cytological preoperative study, were performed in order to establish a preoperative diagnosis. Fine needle aspiration cytology with Papanicolau staining of the cystic fluid is now considered not appropriate.

Conclusion

The definitive diagnosis can only be obtained postoperatively being preoperative diagnosis challenging specially in adults. The clinical presentation consists of non-specific symptoms such as abdominal pain, flank pain, hematuria, urinary tract infections, abdominal mass, as the radiologic reports. This creates a difficult differential diagnosis from malignant cystic renal neoplasm, in particular in adults and it has to be considered in the differential diagnosis of malignant renal tumors both in children both in adults Surgery is the treatment choice to exclude malignant lesions; it includes radical nephrectomy and parenchymal sparing procedures tumorectomy. The choice

is based on the characteristic of the neoplasm such as dimensions, vascularization, symptoms and comorbidities. Final diagnosis can be established only at the histopathology examination of the rejected tumor.

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6. Tuberous Sclerosis Presented With Angiomyolipoma Rupture: A Case Report

C. Grassani[1], M. Potenzoni[1], A.M. Pieri[1], N. Uliano[1], S. Destro Pastizzaro[1], D. Martens[1], R. Arnaudi[1], A. Savino[1], A. Prati[1]

[1] Ospedale di Vaio (Fidenza)

Objective

Tuberous Sclerosis is a rare, autosomal dominant inherited disorder that can present with a multisystemic syndrome characterized by the development of hamartomatous tumor in many organs, but affecting most notably brain, skin, eyes, kidneys, lungs, heart and liver. The clinic symptoms include: mental retardation, seizure, and characteristic skin lesions, but it can be entirely asymptomatic for long time or all life long. It affects1: 100000 persons in the world, with no distinction between the sexes and the races [1]. Renal amgiomylipomas (AMLs) account up to 80% of patients affected by Tuberous Sclerosis (TS), but they can also arise sporadically in population. In case of complicating TS, AMLs show a rapid growth, reaching a very large size. These can cause serious complication such as rupture till hemorrhagic shock as a result of a retroperitoneal bleeding, requiring an aggressive therapeutic approach.

Materials and Methods

We report the case of a 17 years old female, referred to our operative unit for acute flank pain, mimicking renal colic, without fever and hematuria. Personal and familial histories were negative for neoplasms, urinary stone or other significant urologic disease, neurologic pathologies, mental retardation, and cutaneous lesions. Her physical examination was unremarkable. The blood tests showed only mild anemia. At the ultrasound scan (US) the left kidney was difficultly visualized because covered by a hyperecogenic lesion of unclear interpretation suggestive for a bleeding mass. Abdominal computed tomography (CT) revealed a fairly large size, 10x9x10 cm, active bleeding neoplasm with heterogeneous structure and predominant adipose component, situated in the left retroperioneum, impinging and displacing abdominal viscera. Only a part of the normal renal parenchyma, the lower pole, was identified because the majority of the organ was occupied by the neoplasm. Similar, but smaller lesions were described in the contralateral kidney and in the liver. The findings were in keeping with a renal angiomyolipoma in a probable background of ST. The left renal artery angiography confirmed the presence of a voluminous hypervascularized renal mass, with a psudoaneurismatic formation inside the mass.

Results

Based on the immaging reports and in order to preserve renal parenchyma and void nephrectomy the patient was treated by selective arterial embolization, in particular we carried out embolization of the aneurysm-like bleeding site with 3 metallic coils.

Angiography performed after the procedure demonstrated a good control and remission of the hemorrhage, with final complete exclusion of the afferent vessels. The postoperatory course was substantially regular. To define the previous diagnosis of ST we performed a brain Magnetic Resonance (RM) that displayed multiple subependimal calcified nodules along the lining of lateral ventricles. This is a common report seen in about the 90% of ST patients. To complete the diagnostic-therapeutic process, the patient was sent to a rare disease reference center.

Discussions

Tuberous Sclerosis is a rare, autosomal dominant inherited disorder. Tuberous Sclerosis complex is associated with tumor development in brain, skin, retina, heart, kidneys, lungs and liver. Mental retardation, seizure, and characteristic skin lesions commonly manifest in childhood, but some elements emerge later, specially renal amgiomylipomas and pulmonary (AML), lymphangioleiomyomatosis (LAM). Usually presents early in life with the classic triad: seizure, mental retardation, cutaneous angiofibromas, but less than 30% of the patients present all these findings, and 6% of the patients have none, as in our case where the patient was totally asymptomatic, as all the members of her family. As reported in literature, the clinical presentation of STC in adults differs from typical presentation in children. Women with TSC diagnosed in adulthood frequently presented with pulmonary LAM or renal AMLs, but they are less likely to have cognitive disorder and seizure. TSC can occur sporadically or familiarly. Renal AML is a benign mesenchimal hamartomatous neoplasm which is composed of fat, smooth muscle and vascular elements, it is one of the common extracranial manifestations in ST, and is one of the rarely occurring solid tumors of the kidney 2 to 6%. In about 20% they coexist with ST. AMLs larger than 10 cm in

individuals without ST is extremely rare. They can be multifocal in about 33% and bilateral in 15% of all cases. AMLs in tuberous sclerosis occur more frequently as multiple lesions and to growth to larger size as compared with idiopathic AMLs. In ST patients the risk of concomitant renal cell carcinoma is increased of 2-3%, similar to that in general population, but renal cancer, in ST patients, is diagnosed in a younger age. Histologically AMLs are part a family of lesions called perivascular epitheliod cell tumor (PEComas), displaying immunoreactivity for HMB45 (a melanocytic marker), actin and desmin (smooth muscles markers). Usually, they are diagnosed during imaging examination and do not reach large size. They occur multifocally in about 33% and bilaterally in 15% of all cases. Most frequently AML proceeds asymptomatically, having an indolent clinical course, but it can present with hematuria or abdominal pain because of a spontaneous bleeding into retroperitoneal space from abnormal neoformed vessels referred to as Wunderlich syndrome. In fact this neoplasm can have abnormal vasculature, forming aneurysms that can spontaneously break with hemorrhage, as seen in the report. When large they may cause life-threating hemorrhage, but seldom malignant degeneration or metastatization. The risk of bleeding from renal AML in patients with ST varies between 25% and 50%, and it is related to aneurysm size, with a maximum risk for aneurysm major than 5 mm. Diagnosis is based mainly on radiologic scan.
AMLs signicantly affect the outcome of TS because they can invade adjacent normal parenchyma, leading to chronic kidney disease, in addiction they can cause aneurysm that may rupture.

Conclusion

Renal involvement in TS requires careful parenchymal spearing procedures, because of the tendency to develop multiple and bilateral neoplasm, that can result in renal insufficiency, in order to preserve parenchyma functionality and void nephrectomy.
When bleeding occurs trans arterial embolization and surgery are the treatment options. If no hemorrhage happens it is possible to perform cryoablation, embolization, as well, tumorectomy. The choice is based on the characteristic of the neoplasm such as dimensions, vascularization, symptoms and comorbidities. Small lesions, under 4 cm in diameter may be monitored with ultrasound meanwhile for the lesion of more than 4 cm diameter, or the symptomatic one, pain medication, embolization or surgery is necessary.

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7. Margin, Ischemia And Complications (Mic) After Laparoscopic And Robot-Assisted Partial Nephrectomy For Completely Endophytic Renal Masses: A Multi Institutional Analysis

S. Ricciardulli[1], M. Spagni[1], R.. Napoli[1], Q. Ding[2], H. Li[2], F. Borgatti[1], G. Ruoppo[1], A. Celia[3], X. Zhang[2], S. Spatafora[1], F. Bergamaschi[1]

[1] Arcispedale Santa Maria Nuova, U.O. Urologia (Reggio Emilia)

[2] PLA General Hospital, Department of Urology (Beijing)

[3] Ospedale San Bassiano, U.O. Urologia (Bassano del Grappa)

Objective

International guidelines states that renal tumors <7 cm are best managed by nephron sparing surgery (NSS). A very challenging scenario is represented by renal masses that are completely intraparenchymal. Surgical removal of these tumors presents greater technical difficulties and higher risk of peri and post-operative complications. In 2012 Buffi et al proposed a new system to evaluate success after partial nephrectomy (PN), the Margin, Ischemia and Complications (MIC).According to this newly proposed scoring system, an optimal PN is accomplished when surgical margins (SM) are negative, WIT was ≤20 minutes and no major complication (Clavien-Dindo grade 3-4) were observed. The use of this simple system could be of paramount importance to compare and evaluate different approach used to perform PN. Aim of this study is to evaluate differences between laparoscopic (LPN) and robot-assisted PN (RAPN) using the MIC system in completely endophytic renal masses.

Materials and Methods

This is a retrospective multicenters study. Datas of LPN and RAPN were extracted from the medical database of each institute. Patients that performed LPN and/or RAPN from 2008 and 2014 were selected for this study. Before surgery, all patients underwent a computed tomography (CT) scan or magnetic resonance imaging (RMI) in order to evaluate the clinical stage and the anatomical characteristics of the tumors. Based on image of CT scan or RMI, a Preoperative Aspect and Dimension Used for an Anatomical (PADUA) score was assigned to each patients. Patients who received 3 points in the exophytic rate of PADUA classification, which is used to describe the exophytic\endophytic properties of the renal mass, entered in this study. During surgery, a laparoscopic US guidance was used in all cases to identified the renal mass and to help the surgeon to observe the tumor's margin. According to MIC scoring system, an optimal PN is accomplished when surgical margins (SM) are negative, warm ischemia time (WIT) was ≤20 minutes and no major complication (Clavien-Dindo grade 3-4) were observed. Non parametric Mann-Whitney test was used for continuous variables, Pearson x2 correlation for categorical variables.

Results

66 patients were enrolled in this study (31 for LPN and 35 for RAPN group). No differences were observed beetween the two groups in age, gender, BMI, ASA and Charlson comorbidity index (CCI). All renal masses in the LPN and RAPN presented small clinical size (median 2.1 and 2.4 cm respectively; p-value:0.129). LPN group presented

an higher median PADUA score than RAPN group (10 vs 9; p-value 0.018). No differences were observed in PADUA class risk distribution beetween groups (intermediate: 38.7 vs 57.1% high: 61.3 vs 49.9% p-value: 0.135). The PADUA low risk group was not presented in the two cohort. The median WIT was 23.1 (IQR: 17-29) in LPN group and 21.2 (IQR: 18-26) for RAPN group (p-value: 0.257). No differences were observed in surgery duration (p-value:0.356), intra-operative complications rate (p-value: 0.062) and estimated blood loss (p-value: 0.115) beetwen groups. No major complications (dindo grade 3-4) and PSM occurred in the two groups. The MIC rate was 51.6% in LPN and 71.4% in RAPN group, but it was statistically significant (p-value: 0.101). Interestingly, the only difference observed in this report beetween LPN and RAPN was the post-operative eGFR. RAPN group presented a higher median post-operative eGFR than LPN group (p-value: <0.001).

Discussions

The findings of this study shows that MIC score system is a simple and useful tool to report and compare different surgical approach.This system is similar to the trifecta outcomes proposed and validated by other groups of authors. Hung et al, definited the trifecta outcomes when there was negative SM, minimal renal function decrease and no urological complications. Khalifeh et al, definited trifecta outcomes as a WIT ≤25 minutes, negative SM and no intra and post-operative complications. The MIC system is based on aspects validated by literature. Recently a panel of experts proposed that WIT should not ideally exceed 20 minutes and every minutes counts when the hilum is clamped. The Clavien-Dindo classification is the most validated tool to standardized and report surgical complications. Mottrie defined the MIC score system simple to use and encouraged new research to assess is efficacy, especially by comparing its use in different surgical approaches (OPN, LPN and RAPN). This study showed the feasibility and safety of LPN and RAPN for endophytic renal masses, with similar results in terms of negative surgical margin, WIT <20 minutes and no major complications. LPN and RAPN presented similar outcomes if performed by expertised surgeons. A recent study showed that there was no difference between RAPN and LPN in complex tumors (median renal score 8), and this was explained by the authors on the basis of experienced surgeon's experience in laparoscopic and robotic surgery in high volume centers. The transition from LPN to RAPN is simple and can be associated with immediate improvements in perioperative parameters for surgeons with a solid baseline experience with LPN. RAPN may reduce the technical difficulties of LPN [7], especially in complex cases, but a laparoscopic skills are important in robotic surgery. LPN and RAPN are safety and no invasive procedures with similar results if performed by expertised surgeons. In our study RAPN group presented an highest eGFR than LPN group. This aspect also supported the safety and the efficacy of RAPN. In this study we evaluted only the safety of mini-invasive surgery for endophytic renal masses using the MIC system. We did not evaluated the efficacy of LPN and RAPN in terms of oncological results.

Conclusion

This study showed the feasibility and safety of LPN and RAPN for endophytic renal masses, with similar results in terms of negative surgical margin, WIT <20 minutes and no major complications. LPN and RAPN presented similar outcomes if performed by expertised surgeons.RAPN may reduce the technical difficulties of LPN but LPN represents a feasible, safe and effective treatment for selected patients diagnosed with endophytic masses.Our report showed that the MIC score system is simple and useful to report and compare different surgical approach. The use of nephrometry score system may help the surgeon in predicting MIC and in planning the best surgical strategy for patients.

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8. Trends In The Use Of Partial Nephrectomy For cT1 Renal Tumors: Analysis Of A 10-Yr European Multicenter Dataset

G. Simone[1], C. De Nunzio[2], I. Sperduti[3], L. Cindolo[4], D. Collura[5], S. Brookman May[6], R. Papalia[7], M. Ferriero[3], C. Leonardo[8], O. Dalpiaz[9], S. Hatzl[9], M. Lodde[10], E. Trenti[10], A.L. Pastore[11], G. Palleschi[11], G. Lotrecchiano[12], L. Salzano[12], A. Carbone[11], O. De Cobelli[13], A. Tubaro[2], L. Schips[14], R. Zigeuner[9], S. Guaglianone[3], G. Muto[15], M. Gallucci[3]

[1] Ospedale San Giovanni Bosco, Istituto Nazionale Tumori "Regina Elena" (Torino, Roma)
[2] Ospedale Sant'Andrea (Roma)
[3] Istituto Nazionale Tumori "Regina Elena" (Roma)
[4] Ospedale Padre Pio da Pietrelcina (Vasto)
[5] Ospedale San Giovanni Bosco (Torino)
[6] Ludwig-Maximilians-University Munich (Munich)
[7] Istituto Nazionale Tumori "Regina Elena" , Università Campus Biomedico (Roma)
[8] Università La Sapienza (Roma)
[9] Medical University of Graz (Graz)
[10] Ospedale Generale di Bolzano (Bolzano)

[11] **Università La Sapienza, ICOT (Latina)**
[12] **Ospedale G. Rummo (Benevento)**
[13] **Istituto Europeo di Oncologia (Milano)**
[14] **Ospedale Padre Pio Da Petrelcina (Vasto)**
[15] **Ospedale San Giovanni Bosco, Università Campus Biomedico (Torino, Roma)**

Objective
Although several studies from US cancer registries have reported the underuse of PN for cT1 renal tumors, at the best of our knowledge, this trend in European centres has not been addressed. In this study we evaluated the impact of hospital volume on the trend in performing PN vs. radical nephrectomy (RN) for cT1 renal tumors.

Materials and Methods
A retrospective analysis of data collected at 10 European centres was performed to evaluate the trends in the use of PN in the last decade among centers with different "kidney cancer" yearly caseload.
Centers were considered as "low volume", "mid volume" or "high volume" when the mean yearly caseload was <15, 15-35, and >35 cases/year, respectively. The trend in the use of PN (rate of PN/total procedures) for cT1 renal tumors was evaluated with the average annual percent change (AAPC) for each group. This test provides a measure of the weighted average of the slope over a fixed time interval. The trends were then compared one versus each other with the joinpoint regression analysis (Joinpoint software version 4.1.1.1).

Results
Overall, 2526 patients were treated: 1505 (59.6%) were treated at 2 high volume centers, 887 (35.1%) at 5 mid volume centers and 134 (5.3%) at 3 low volume centers. The trend in the surgical treatment of cT1 renal tumors in low-volume centers confirmed the underuse of PN in the last decade; besides, the trend did not show any significant improvement along the decade, neither for cT1,nor for cT1a, nor for cT1b ($p=0.67$, $p=0.7$, $p=0.76$, respectively). On the contrary, in mid volume centres there was a significant paradigm shift in favor to PN, both for cT1, and for cT1a and for cT1b renal tumors ($p=0.002$, 0.0005 and 0.007, respectively). High volume centres experienced the strongest paradigm shift toward PN (all $p<0.0001$). The trends for cT1, cT1a and cT1b renal tumors were depicted in Figure 1,2 and 3, respectively. A between group comparison confirmed the trends both for high volume and for mid volume significantly different by that of low volume centres (all $p \leq 0.002$) and highlighted statistically significant different also between mid volume and high volume centres (all $p \leq 0.03$). Results of joinpoint regression analysis, with AAPC values, 95% CI, slope p values and between group comparisons were summarized in table 1.

Discussions
Partial nephectomy is today an established treatment for cT1 renal tumors. Both the European Association of Urology and the American Urological Association guidelines recommend partial nephrectomy as the treatment of choice for cT1 renal tumors when "technically feasible". [1,2] The feasibility of such treatment is mainly driven by surgical skills, therefore the trend toward a wide use of partial nephrectomy is based on a minimum caseload that guarantees the sufficient surgical skill. While some Authors have reported an increasing trend in performing partial nephrectomy in US institutions along the last decade, at the best of our knowledge, this is the first report on the trend in the use of partial nephrectomy versus radical nephrectomy in European centres.

Conclusion
The use of partial nephrectomy as treatment of choice for cT1 renal tumors is mainly based on surgical skills. These data, obtained by a large multi-institutional dataset, confirm the strong role of yearly caseload in determining the paradigm shift toward partial nephrectomy for cT1 renal tumors. Based on these findings, the paradigm shift observed in mid volume centres along this decade suggests that the achievement of a minimum caseload would turn the tide also in low volume centres. Finally, the significant difference observed between high volume and mid volume centres confirm the importance of a selective referral to high volume centres, especially for cT1b renal tumors.

9. Laparoscopic Nephrectomy Versus Open Radical Nephrectomy In Uremic Patients With End-Stage Renal Disease

L. Dell' Atti[1], C. Ippolito[2], G. Ughi[2], L. Fornasari[2], G. Capparelli[2], G.R. Russo[2]
[1] **Arcispedale Sant'Anna, Divisione di Urolgia (Ferrara)**
[2] **Arcispedale Universitario Sant'Anna, Divisione di Urolgia (Ferrara)**

Objective
Uremic patients with end-stage renal disease (ESRD), who have undergone continuous peritoneal dialysis (PD) and hemodialysis (HD) treatment, require a minimally invasive approach when undergoing a surgical approach. This is due to the fact that they are at high risk for intraoperative and postoperative complications due to comorbidities such as immunosuppression, platelet dysfunction, anemia, and electrolyte abnormalities. In this study we analysed the feasibility and safety of laparoscopic radical nephrectomy (LRN) versus (vs) open radical nephrectomy (ORN), in terms of perioperative and postoperative outcomes, in uremic patients with ESRD.
Materials and Methods
Between September 2007 and December 2013, 19 patients with ESRD, who underwent LRN or ORN for chronic pyelonephritis, renal calculi leading to recurrent urinary tract infection or hydronephrosis, renal tumors, complicated cyst or polycystic kidney associated, were retrospectively analysed. All operations were performed by three experienced surgeons of our Department. All patients (14 men and 5 women) with complete preoperative clinical and intraperioperative parameters including age at surgery, gender, Body Mass Index (BMI), ASAscore, surgical approach, operation time, intraoperative complications, immediate postoperative complications, tumor-size, tumor grade and pTNM stage were available for further analyses. The 30-day complication rate in both groups was retrospectively review and graded according to the modified Clavien System in five grades. Postoperatively, patients with renal tumors were followed every 3-4 months in the first year, every 6 months in the second year, and annually thereafter. All statistical analyses were conducted on Microsoft Excel 2010 platform. Statistical analysis of the mean values of continuous variables was performed using the Student's t-test and analysis of the significance of the categorical variables was performed using the chi-square and Fisher tests. A $p < 0.05$ was considered to indicate statistical significance.

Results
Overall, 9 (47.3%) vs 10 (52.7%) patients underwent LRN vs ORN, respectively. The mean age found was 67.34 ± 14.54 years in LPN group (G1), and 68.18 ±13.41 years in ORN group (G2) ($p=0.247$). The mean BMI [22.3±4.3Kg/m2 (13.5-31.1) vs 27.1±5.3Kg/m2 (13.1-42.3), $p=0.001$] of patients in G1 were lower relative to G2. The mean ASA score [2.7±0.8(G1) vs 2.9±0.7(G2)] did not show significant statistically differences in both groups respectively ($p=0.632$). The patients of G1 underwent nephrectomy: 4(44.5%) for renal cell carcinoma (RCC), 3(33.3%) for complicated cyst and 2(22.2%) for calculi infected and hydronephrosis, while the patients of G2: 5 patients (50%) for RCC, 2(20%) for chronic pyelonephritis, 1(10%) for infected hydronephrosis and 2(20%) for polycystic kidney. There was no significant difference between the two groups in terms of mean tumor size and tumor stages ($p=0.364$). The estimated blood loss was 223±155mL in G1 and 455±134mL in G2 ($p<0.005$). Both groups were comparable with regard to mean operation time [145±54 min (89-203) in G1 vs

135±67 min (87-215) in G2; p=0.753]. The mean hospital stay was 5.95 ± 1.85 days in G1, and 8.10 ± 1.67 days in G2 (p<0.001). After an early post-operative period pain necessitating analgesics was observed in all patients (100%) of G2 and only in 3 patients of G1 (Grade 1 complications). Blood transfusions were required in 4 patients (44.4%) in G1, and in 8 (80%) patients in G2. (Grade 2 complications) (p =0.01). Grade 3 complications was not observed in both groups. Grade 4 complications occurred in 3 (30%) patients (1 pulmonary embolism, 2 atrial fibrillation) in G2, and in 1 (11.1%) patient (atrial fibrillation) in G1. One patient of G2 died within 30 days of surgery (Grade 5 complications).

Discussions

Since its introduction by Clayman et al. in 1991, LRN has been an accepted treatment modality for several kinds of renal disease. Laparoscopic surgery is a minimally invasive treatment, it results in reduced blood loss, a shorter postoperative hospital stay, minimal wound pain, reduced need for analgesics, an earlier return to normal activity, quick oral intake, and improved cosmesis. However, there are few studies focusing on the out-comes of LRN for dialysis-dependent ESRD patients and the number of patients in these reports is small. Many conditions concerning mainly the anaesthesia procedures do affect the laparoscopic success of uremic patients. It is important to emphasize the uremic patients is associated with metabolic acidosis that can be aggravated with CO2 insufflation during LRN. Hypercapnia consequently may deteriorate the underlying chronic metabolic acidosis of the uremic patients leading to cardiovascular collapse and dysrhythmias as in two patients in G1. However the present study revealed that LRN is not associated with increased operative and postoperative morbidity in terms of metabolic acidosis in the hands of an experienced anesthesiology team (p=0.347).

For uremic patients, the indications for using a retroperitoneal approach vs transperitoneal approach for LRN is still much discussed. Okegawa et al. showed no statistically significant difference between a retroperitoneal or transperitoneal approach for LRN in ESRD patients. We have always performed LRN by using a transperitoneal approach, which allows a large working space and possibility removing a large tumor or fragile tissue (eg. cysts). According our opinion a retroperitoneal approach caused cyst rupture and tumor cell dissemination.

Conclusion

Laparoscopic surgical techniques were developed to reduce the morbidity of the surgical management. Little is know about renal laparoscopy in uremic patients, and to date, there are only a small number of cases series reported in the literature regarding management of surgery in ESRD patients . The present study revealed that laparoscopic surgery in uremic patients might be performed safely under experienced of laparoscopy team. This surgical technique is a minimally invasive treatment, it reduces blood loss, shortens the postoperative hospital stay, minimizes wound pain, and results in an earlier return to normal activity. However, long-term follow-up and multicentre studies suggest that LRN in uremic patients does not compromise life expectancy and oncologic efficacy in treatment of tumors as in our study.

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10. Laparoscopic Pyeloplasty. What Is Changed After More Than 300 Surgical Procedures And 10 Year Of Experience

C. Meccariello[1], M. Fedelini[1], R. Giannella[1], L. Pucci[1], F. Chiancone[1], P. Fedelini[1]

[1] A.O.R.N. A. Cardarelli, U.O.S.C. Urologia (Napoli)

Objective

Purpose of the study: to describe and analyze a single surgical team's experience of the Anderson-Hynes transperitoneal laparoscopic pyeloplasty (LP) procedure in the treatment of UPJO. We analyze what is changed after more than 300 surgical procedures and 10 year of experience

Materials and Methods

316 consecutive patients whose underwent transperitoneal (LP) over a period of 11 years (january 2004-february 2015) were retrospectively analyzed for intraoperative complications. 301 consecutive patients were analyzed for postoperative complications because 15 patients underwent pyeloplasty from September 2014 to February 2015). In 297 cases surgical indication was primary uretero-pelvic junction obstruction (UPJO) and in 19 cases recurrent obstruction. Two hundred and ninety patients (91%) were symptomatic. All procedures described here were performed by a single experienced laparoscopic team. In all cases pyeloplasty using the Anderson-Hynes technique was performed. A transperitoneal approach was used in all cases. Ventrally crossing vessels were found in 126 patients (40%). 3 cases consisted of a horseshoe kidney. A retrocaval ureter was diagnosed in one case while in 7patients a large parapyelic cyst was associated with UPJO. Treatment success was defined by imaging (partial or complete resolution of hydronephrosis), functional assessment (improvement at renal scan) and on the basis of clinical findings. Renal ultrasonography and IVU were performed 6, 12 and 18 months postoperatively and a yearly follow-up with either IVU or renal ultrasonography thereafter was indicated. Intraoperative incidents were analyzed 1. The patients were positioned in lateral decubitus after placement of the ureteral catheter ana ureteropyelography. Initial transperitoneal access was performed through an open Hasson approach. A 0° telescopic and 2 multi-disposal metal trocars were used. Dissection was performed by using monopolar scissors and bipolar forceps. The proximal ureter was spatuled with a lateral incision after resection and removal of the stenotic ureteropelvic junction. Ventrally crossing vessels were generally transposed only in cases of real obstruction. The anastomosis was performed using a running 5-0 absorbable suture. A double-J stent was routinely inserted in retrograde fashion but in male patients this step was completed at the end of the laparoscopic intervention under fluoroscopic and cistoscopic control2.

Results

Mean operating time at 94.5 minutes (range 40 to 360). The mean blood loss was 20 mL (range 5 to 500 mL) and no blood transfusions were necessary. All operations were successfully performed laparoscopically without conversion to open surgery. The overall success rate was 99% (298 patients) with a mean follow-up

of 38 months (range 6 – 84 months). We didn't report intra or postoperative complications in the patients with anomalous crossing vessel not transposed and the surgical procedures resolved the UPJO in all these cases. The mean postoperative hospital stay was 4.1 days (range 3 to 14). All 290 preoperative symptomatic patients reported a complete resolution of symptoms following the procedure. The radiologic follow-up showed a normal UPJ and a significant reduction in preoperative hydronephrosis in all patients with the exception of 15 (5%) for whom persistence of a partial UPJO and moderate-to-severe hydronephrosis was detected at first post-operative follow-up visit at month 6. All cases were initially conservatively treated by retrograde insertion of a double-J stent left in place for 3 months and this treatment resulted in a definitive resolution of persistent UPJO in 8 cases3. The remaining 7 patients underwent a successful second laparoscopic dismembered pyeloplasty. Intraoperative incidents occurred in 9 patients (2.8%). The most frequent intraoperative incident was retrograde stent migration to distal ureter and all cases occurred with female patients. The most frequent postoperative complication was urine leakage (2%)4.

Discussions

From first pyeloplasty ten years ago, we have reduced operating time from about 5 hours to about 1 hour. The overall success rate is reaching 100% with a progressive reduction of complications. During these years we have improved our technique and we have discovered some important strategies that could help to improve the success of procedure. First of all we consider that the isolation of the ureteropelvic junction should be much more "in situ". Moreover you should coagulate sections margins as less as possible, in particular ureteral margins in order to make ureteropelvic anastomosis more vital. Pay attention to perform a "tension free" anastomosis, in the correct position (as more anatomical as possible) and without make it twisted. In our experience the most delicate surgical step is the insertion of the ureteral stent because, if inserted incorrectly it can cause time-consuming intraoperative complications or induce moderate to severe postoperative complications. For this reason we refined our technique and started to routinely perform some modifications such as retrograde insertion in female patients and insertion under fluoroscopic and cistoscopic control at the end of the operation in male patients. Our future target will be the intraoperative stent placement, also in male patients, using a flexible cistoscopy, before anterior hemisuture. Particular attention should be given to the early postoperative phase so as to monitor for eventual urine leakage which could lead to a severe complication that which would require active management. Improving our overall success, we have increased follow-up period. Although we never undervalue the importance of follow-up. It's important to inform patient and his family about results and expectations, without consider laparoscopic pyeloplasty a simple procedure. In this period we have improved our surgical experience in with important functional results. By our experience we think that new "barbed suture" will not improve success rate, robotical surgery is too much expensive without improving success rate (at least in the centers with an important laparoscopical experience). Also 3D laparoscopy and minilaparoscopy don't improve success rate.

Conclusion

Our retrospective analysis confirms that the Anderson-Hynes transperitoneal laparoscopic pyeloplasty (LP) procedure is a efficacious and safe in the treatment of UPJO, resulting in a reported success rate of 99% and a concomitant low level of intraoperative and postoperative complications. The most frequent and severe intraoperative complications are related to the double J stent insertion. The most common postoperative complication is urine leakage that in the case of a transperitoneal approach requires an early active management in order to avoid potentially severe consequences. New technologies as robotic devices, 3D laparoscopy and minilaparoscopy can help surgeon to perform important step during pyeloplasty, but they are not necessary, above all in hospitals with a big surgical volume.

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11. Laparoscopic Pyeloplasty. What Is Changed After More Than 300 Surgical Procedures And 10 Year Of Experience

C. Meccariello[1], M. Fedelini[1], R. Giannella[1], L. Pucci[1], F. Chiancone[1], P. Fedelini[1]

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12. Presence Of Multiple Stones With The Same Overall Diameter Instead Of A Single Stone Wich Influence Has On Stone Free Rate?

L. D'Arrigo[1], F. Savoca[1], A. Costa[1], A. Bonaccorsi[1], A. Cacciola[1], E. Witt[2], N. Gill[2], M. Pennisi[1]
[1] Ospedale Cannizzaro, U.O. Urologia (Catania)
[2] Statistic and Probability Unit - University of Gröningen (Gröningen)

Objective
Over the last years the high diffusion of endoscopic intrarenal surgery reduced percutaneous treatments. In selected cases it offers to treat patients with stones above 2 cm in diameter. Some studies have evaluated some paremeters as predictive of stone free rate like stone burden, others the influence of calyx anatomy an its spatial position in particular the infundibular width (IW), infundibular length (IL), and infundubular angle (IPA) on stone free after extracorporeal lithotripsy or RIRS. In some studies a percent of success > 90% in presence of renal stones treated by RIRS and 85 % in presence of lower pole stones ere reported. However it's still unclear if calyx anatomy influenced the stone clearance in patients who have undergone to RIRS (8,9). When multiple stones are present, the retrograde approach is not always shared; the guidelines consider the stones location and size as only elements that affect the choice of treatments. The objective of our study is to evaluate stone free-rate when multiple stones with the same overall diameter instead of a single stone are present.

Materials and Methods
In the period between June 2012 and December 2013, 106 patients with urinary stones were treated with RIRS. A total of 115 procedures were performed. Anagraphic data, stone burden and density, number of stones, operative time, kidney anatomic data (infundibular length, collector width, and infundibolopyelic angle), idronephrosis, preoperative presence of nephrostomy tube or double J were evaluated. Stone burden and density stones were analyzed by preoperative NCCT scan. When more than one stone was present the diameter, volume and area was calculated like the sum of a single value. All procedures were performed under general anesthesia and a semirigid ureterorenoscope with a 6/7.5F or 8/9.8 was used routinely for dilatation of the ureter passed over a hydrophilic guidewire. After an ureteral access sheath was placed. In all patients a flexible URS, with 200 micron holmium laser lithotripsy was used. We used a holmium-yag laser machine set at an energy level for stone fragmentation or pulverization according to type of urinary stone and choice of setting was entrusted to the operator on the basis of his experience. Basket fragment extraction was not routinely performed but when basketing was deemed necessary, we used a 1.9F zero-tip nitinol stone basket. The operators were two urologists with the same experience having performed more than 50 flexible ureterorenoscopy. A double J stent was placed in every patient after procedure. If the operative time was over 90 min we stopped intervention and placed a

double j. We considered patients without stones or residual fragments below 4 mm after a three months treatment stone free. The software R was used for statistical analysis.

Results

Statistical analysis showed that the diameter (p=0.0006), and presence of stones in more than one location (p=0.017) correlate significantly with outcome treatment. The overall stone free rate was 77%; We classified the stone free rate according to diameter ≤ 2 cm and > 2 cm. The SFR were for the stone burden ≤ 2 cm and > 2 cm on diameter were 85% and 55% respectively. Among eighty six records of patients who had stone burden ≤ 2 cm, seventy three (85%) were stone free, therefore our overall stone free rate for the stone burden ≤ 2 cm was (85%). For the stone burden > 2 cm our overall stone-free rate was 55%. The infundibular length (p=0.186), width (p=0.207), angle (p=0.252), volume (p=0.3573), density (p=0.7784) didn't correlate to SF. However, if we considered only patients with stones in lower pole, an infundibolopielic angle below to 38.2° it would negatively influence stone free rate (p=0.001). Operation time was less in the patients SF (p=0.0003) and a correlation with stone size (p=0.0002) was found. Stone density has statistically significant correlation with operation time (p=0.01). When the diameter is the same the presence of more than one stone worsened stone free rate and these results are statistically significant. We can see clearly in the above table 1 that when the diameter and number of stones increases, the probability of stone free patients started to decrease. Anyway the clinical effects of this have a low relevance.

Stone diameter

N° of stones	1 cm	2 cm	3 cm	4 cm
1	94%	81%	55%	25%
2	94%	80%	52%	23%
3	93%	78%	50%	21%
4	92%	76%	47%	20%

Discussions

Intrarenal retrograde laser lithotripsy and SWL are considered the treatment of choice in patients with renal stones < 1 cm, recommends percutaneous procedures in patients with stones over 2 cm. Anyway in presence of stones between 1 and 2 cm EAU guidelines recommend as treatment to prefer SWL or endourologic procedure without distinction between RIRS o PCNL. In presence of lower pole stone between 1 and 2 cm with non favourable factors to SWL the endourology treatment is recommended as treatment of first choice. The reasons of these are represented by presence high percentage of residual fragments after SWL who are related to stone size and composition, and to pielocalycal anatomy. Lingeman et al, reported, in a meta-analysis study an overall stone free rate of 59,2% and 90% in patients with lower pole stones of 1-2 cm treated respectively with SWL an PCNL. Another recent prospective, randomized study compare shock wave lithotripsy, retrograde intrarenal surgery and miniperc for 1 to 2 cm radiolucent lower calyceal renal stones to evaluate the safety and efficacy of these procedures. The results show that SFR was 73.8%, 86.1% and 95.1% for SWL, RIRS and miniperc with higher incidence of overall complications for miniperc than for SWL and RIRS (24.3% vs 7.1% and 9.3%. Breda et al. in their study analysed 51 patients with unilateral multiple renal stones. The stone-free rates for patients with a stone burden greater than and less than 20mm were 85.1% and 100%, respectively. The authors concluded that for patients with multiple intrarenal calculi, flexible ureteroscopy with holmium laser lithotripsy may represent an alternative therapy to ESWL or PNL, with acceptable efficacy. In our study we found that the multiple stones negatively influenced stone free rate (p.value=0.003). However when we have stone with diameter until 2 cm, even with multiple stones the overall stone free rate isn't never below 76%. We can see clearly in the above table that when the diameter and number of stones increases, the probability of patients stone free started to decrease. Anyway even if the data is statistically significant the clinical effect is low.

Conclusion

Overall diameter strongly influences on stone free rate unlike the stone density. Calyceal anatomy has a negative effect on stone clearance when angle calyx is lower than 38.2°. In conclusion we can consider retrograde intrarenal surgery as a useful procedure also when multiple renal stones are present. We can conclude that in our study the factors that influenced stone free rate are represented by higher stone diameter, stone number and when urinary stones in lower calyx are present by highly infundibolopielic angle. Stone density measured by NCTC can be considered useful for planning operative strategy and can influence operative time.

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13. RIRS Nel Trattamento Della Calcolosi Renale: Un Nuovo Standard?

M. Perachino[1], F. Marchesotti[1]

[1] Ospedale Santo Spirito, S.O.C. Urologia (Casale Monferrato)

Objective

Secondo le Linee Guida Auro.it, il trattamento di prima scelta della calcolosi renale è l'ESWL se i calcoli sono > 2 cm e la PCNL in caso di calcoli di dimensioni maggiori, a stampo, in diverticoli caliciali o al polo inferiore. I primi casi di approccio endoscopico intrarenale risalgono al 1990. Il miglioramento degli strumenti, dell'efficacia dei laser unitamente ad una discreta percentuale di fallimenti dell'ESWL hanno contribuito ad allargare progressivamente le indicazioni al trattamento intrarenale della calcolosi (RIRS) non solo a scapito di tecniche più invasive, ma anche di quelle meno invasive come l'ESWL.

Materials and Methods

Presentiamo la nostra esperienza di RIRS per calcolosi renale. Le indicazioni di prima scelta erano:

– presenza di calcolosi multipla
– calcolosi caliciale inferiore
– calcolosi ureterale concomitante
– push up endoscopico
– pazienti con indicazioni alla PCNL che, adeguatamente informati sui risultati e sulle complicanze, preferivano un approccio endoscopico per ragioni cosmetiche

Abbiamo pertanto considerato 96 pazienti consecutivi negli ultimi due anni, di età compresa tra i 19 e gli 86 anni, 48 m e 48 f. per complessivi 107 calcoli, di dimensioni tra 5 e 40 mm misurati nel loro diametro maggiore. In 27 pazienti il trattamento era conseguente a fallimento di ESWL, in 10 push up endoscopico, nei rimanenti endoscopico di prima scelta. Dei 107 calcoli trattati, 55 erano pielici, 24 caliciali inferiori, 18 caliciali medi, 8 caliciali superiori e 2 a stampo pielici. Gli strumenti utilizzati sono stati l'ureteroscopio Olympus 6,8 F quando possibile ed il nefroscopio flessibile Storz. La fonte di energia il laser da Holmio Storz Calculase 10W con fibre da 230 a 365 micron

Results

Il tempo operatorio medio è stato di 48 minuti (min 30, max 130), con una degenza media di 2,2 giorni (2-6). Nella totalità dei pazienti è stato posto uno stent che è stato mantenuto per una media di 16,5 giorni (8-63 giorni) In 85 pazienti è stato sufficiente un solo trattamento per ottenere la bonifica completa, mentre 4 e 1 paziente sono stati sottoposti a 2 e 3 trattamenti rispettivamente. 6 pazienti sono stati sottoposti ad ureterolitotrissia di completamento per la presenza di frammenti intraureterali ostruenti non visualizzati alla lastra di controllo pre rimozione. Stratificati per dimensioni del calcolo, i pazienti con calcoli inferiori 1,5 cm erano stone free a 3 mesi in 63/65 casi (96,9%), quelli tra 1,5 e 2,5 cm erano stone free in 29/32 casi (90,6%) e quelli con calcoli > 2,5 cm erano stone free in 5/10 casi (50%): la maggior parte di questi ultimi presentava frammenti lungo l'uretere (4 ureterolitotrissie ancillari) e/o frammenti nei calici renali. Complicanze intraoperatorie solo una risalita accidentale dello stent prontamente riposizionato. In 4 pazienti vi è stata iperpiressia postoperatoria con TC > 38,5C. Due pazienti hanno presentato macroematuria persistente con necessità di lavaggio continuo per due giorni. 3 pazienti sono stati riammessi in Ospedale per dolore e/o iperpiressia entro 10 giorni dalla dimissione.

Discussions

Il trattamento della calcolosi renale classicamente si basa sull'ESWL o sulla PCNL a seconda delle dimensioni e della posizione dei calcoli. L'approccio retrogrado endoscopico è stato proposto fin dal 1990, ma è grazie alle migliorie di strumenti ed efficacia del laser che negli ultimi anni ha guadagnato uno spazio sempre più preminente nell'armamentario urologico. Una recentissima metanalisi e review sistematica sulla PCNL versus RIRS versus MIPPs (Miniperc e Microperc) ha evidenziato come la PCNL sia associata ad una maggiore percentuale di stone-free, superiore alla RIRS, laddove la RIRS però presenta stone-free rates superiori alle MIPPs. D'altra parte però, la PCNL presenta percentuale di complicanze significativamente superiori. Per questo motivo gli autori concludono che nei calcoli fino a 2 cm la RIRS debba essere considerata la terapia standard, laddove sia disponibile lo strumento flessibile. Nella nostra esperienza abbiamo ottenuto risultati in termini di % di pazienti stone-free a 3 mesi del 96,9% e del 90,6% rispettivamente per calcoli sotto 1,5 cm e sotto 2,5 cm. Questi dati risultano paragonabili a quanto presente in letteratura. Purtroppo non abbiamo provveduto a misurare l'area dei calcoli se non negli ultimi tempi per cui ci siamo limitati ad indicare il diametro maggiore. Sottolineiamo però che tali risultati si ottengono dopo un adeguata learning curve che nelle nostre mani si è dimostrata essere di circa 50 casi.

Conclusion

Nelle nostre mani, la RIRS si è dimostrata una tecnica affidabile, con minime complicanze e con elevata percentuale di pazienti stone-free dopo un solo trattamento. I migliori risultati si ottengono con calcoli < 1,5 cm ma possono essere trattati con buonissimi risultati anche calcoli fino a 2,5 cm, superata la learning curve di almeno 50 casi. Per questi motivi da tempo proponiamo in prima scelta la RIRS ai nostri pazienti con calcolosi fino a 2,5 cm, calcolosi renale multipla, calcolosi caliciale inferiore oltre naturalmente ad eseguirla in tutti i casi in cui avviene un push up endoscopico in corso di ureterolitotrissia o nei casi di fallimento ESWL.

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14. Supine Or Not Supine? Our Initial Experience On Oblique Supine PCNL

L. Timossi[1], G.M. Badano[1], C. Pezzica[1], T. Montanaro[1], E. Daglio[1], E. Rikani[1], C. Calcagno[1], C. Introini[1]
[1] Ospedale Evangelico Internazionale (Genova)

Objective

To compare the efficacy and safety of percutaneous nephrolithotomy (PCNL) in the prone and modified supine positions.

Materials and Methods

The study cohort consisted of 50 patients, who underwent PCNL from January 2006 to December 2013. The first 30 cases undergo prone PCNL while the second 20 cases undergo oblique supine PCNL. Patients were included if they had kidney stones of at least diameter >2.0 cm and had not previously undergone nephrostomy; and if they did not have serious cardiovascular or cerebrovascular disease or a hemorrhagic tendency. All patients were definitively diagnosed preoperatively by plain ultrasonography and Uro CT plain scan. PCNL procedure. The entire procedure was performed with the patients under general anesthesia. Patients randomized to the prone position group were placed in the lithotomic position,and retrograde ureteric catheterization was performed. All other procedures were completed in the prone position.In the oblique supine group 5 patient were subjected to ECIRS. All the kidney punctures were performed by ultrasound and fluoroscopic guidance for both the two groupes and the lower calyx was the most frequent site of target calyx puncture in both groups.In all the cases a 24ch nephrostomy catheter was inserted.

Results

The mean operation time was not significantly different in the two groups with a mean time of 87 minutes for the prone position while the mean time was of 94 min for the patients who ungergo PCNL in oblique supine position. The stone free rate was of 83,3% in the group who undergo PCNL in the prone position. The rate of stone free was of 85% in the oblique supine group.No patient experienced major complications.There were no significant between group differences in use of analgesics, mean hospital stay, hospitalization expenses, medicine therapy, mean blood loss, and need for blood transfusion. The 5 patients who didn't result stone free after a prone PCNL were subjected 2 to ESWL treatment 2 to second look PCNL and 1 to a RIRS procedure. The 3 patients who didn't result stone free after oblique supine PCNL were subjected 2 to RIRS and 1 to ESWL.

Discussions

PCNL is at this time the gold standard on the treatment of renal calculi greater than 2cm. Our initial experiences

suggested that oblique-supine PCNL is a safe and effective choice that offers several advantages with excellent outcomes. PCNL with the patient in the supine position can provide uniform comfort for the anesthesiologist, patient, and surgical team.When the PCNL procedure is performed with the patient in the prone position, a ureteral catheter is commonly fixed in the lithotomy position before the patient is turned; however,PCNL in the supine position does not require turning. Furthermore, PCNL in the oblique supine position facilitates the completion of ureteroscopic processes at the same time with an encrease in stone free rate.

Conclusion

The prone position has been the traditional and most widely used position since PCNL emerged in the mid 1970s. Surgical advantages include straightforward renal puncture, spontaneous evacuation of stone fragments facilitated by horizontal sheath position and hand of surgeon is outside the field of radiation. Proposed technical advantages include uncomplicated patient positioning, less manipulation of patient under anesthesia and decreased operating room time.PCNL is a choice in the treatment of large kidney stones because of excellent outcomes and acceptably low morbidity.The prone approach provides a larger surface area for the choice of puncture site and a wider space for instrument manipulation. However, the prone position has several disadvantages:respiratory and cardiovascular risks; ventilatory difficulties, especially in obese patients and in elderly patients with compromised cardiopulmonary status; and the need for position changes during the procedure.Supine PCNL was first reported by Valdivia et al. in 1998 and is regarded as possessing several advantages. Anesthesiologists prefer the supine position because of better airway control during procedures and the less modification sin the blood pressure. Another advantage of the supine position is that there is no need for position changes to perform other endoscopic procedures such as cystoscopic or ureteroscopic operations. The supine position enables simultaneous retrograde ureteroscopic procedures during PCNL without any position change reducing the surgery time and improving the stone free rate.

15. An Alternative Technique For Treating Long Mid-Ureteral Strictures And Defects

S.M. Palermo[1], E. Trenti[1], E. Comploj[1], D. D'Andrea[1], C. Ladurner[1], M. Lodde[1], C. Mian[1], A.. Pycha[1]
[1] Ospedale di Bolzano (Bolzano)

Objective

Mid-ureteral strictures and defects represent one of the most serious reconstructive challenges for urologists. We describe a new technique of ureteral reconstruction using a peritoneal graft in 6 highly selected cases.

Materials and Methods

Between January 2006 and December 2014, 6 patients with mid-ureteral narrowing and obstruction were treated using a peritoneal graft. Stricture/defect length ranged from 4 to 12 cm. Due to their length, all cases would have otherwise required an ileal ureter, nephrectomy or autotransplantation. Two cases were secondary to long strictures from retroperitoneal fibrosis after vascular surgical procedures and one case was secondary to repeated endoscopic procedure for urinary stones. The other 3 cases followed an extensive resection required for large intraureteral masses (2 papillomas and 1 pTaG1) resulting in insufficient ureteral width for closure.

Following ureteral incision and/or partial resection, a free peritoneal graft was harvested from nearby healthy peritoneum. An onlay patch was fixed with running suture to the remaining ureteral plate after placement of an indwelling ureteral catheter. Finally, the ureter was then complete wrapped with greater omentum.

Results

Patient follow-up has ranged from 3 months to 5 years (average 32.5 months). All postoperative courses were uneventful. The urethral catheter was removed after intravenous pyelography on the 10thpostoperative day. The ureteral stent was removed six weeks post-operatively in 3 patients and after 3 months in the other 3 patients. After 3 months was performed an intravenous urography, which showed the patency and the drainage of the ureters. After 9 months the uro-CT showed no obstruction and a good passage of the contrast without dilatation of the upper urinary tract. The follow-up were performed then annually by IVP, CT-urograms and/or abdominal ultrasounds and showed until now the patency of the ureteral reconstruction.

Discussions

The ureteric strictures can be caused by several factors like stones, infections, fibrosis, malignancy, radiotherapy or iatrogenic surgical trauma after hysterectomy, colorectal and vascular surgery or after endourological surgery. If the stricture is too long or not suitable for treatment with end to end anastomosis, Boari flap or Psoas hitch technique, may require an ileal ureter, autotransplantation or nephrectomy. These procedures are complex and associated with high risk of complications specially in unprepared patients in emergency situations. Furthermore, if the stricture involves the middle ureter, the risk of ischemic necrosis, due to the reduced vascular supply at this level, can be high even for shorter lesions and an end to end anastomosis is not recommended even if feasible, As alternative to these complex procedures, Naude (1) other Authors (2-3-4) have reported the successfull use of buccal mucosal patch graft for the reconstruction of a variety of ureteric lesions without major complications. Based on this findings we have treated these long mid-ureteral strictures using a peritoneal patch graft, wrapped with greater omentum. The advantage of this technique is the unlimited availability of the material, which can be simply harvested from nearby healthy peritoneum without related complications. Furthermore this technique allows a good drainage of the upper tract and patency of the ureter, praserving as much as possible the vascular supply and reducing the risk of ischemic necrosis.

Conclusion

Mid-ureteral strictures and defects represent one of the most serious reconstructive challenges for urologists. We describe a novel technique for treating long mid-ureteral strictures or defects using a peritoneal graft wrapped with greater omentum. In a small group of patients with long mid-ureteral strictures this technique showed good results in terms of maintaining patency and good urinary drainage. It is technically simple and devoid of complications, feasible even in emergency situation and allows for preservation of any remaining vascular supply of the ureter. In conclusion it can be an usefull alternative in highly selected cases to nephrectomy, ileal ureter and autotransplantation and even to buccal mucosal graft repair.

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16. Analysis Of Factors Favoring Onset Of Fever After Retrograde Intrarenal Surgery For Kidney Stones

L. D'Arrigo[1], F. Savoca[1], A. Costa[1], A. Bonaccorsi[1], A. Cacciola[1], N. Gill[2], E. Witt[2], M. Pennisi[1]
[1] Ospedale Cannizzaro, U.O. Urologia (Catania)
[2] Statistic and probability Unit - Gröningen University (Gröningen)

Objective

Bladder Cancer (BC) is the most common malignancy of the urinary tract and the seventh most common cancer

in men and the 17th in women. The world global age standardised mortality rate is 3 for men versus 1 per 100,000 for women. Approximately 70% of patients with BC present with a disease that is confined to the mucosa (stage Ta, CIS) or submucosa (stage T1) and approximately 30% of patients present a muscle-invasive bladder cancer (T2 or more)1. According to current European Association of Urology (EAU) guidelines, a routine second transurethral resection (TUR) is mandatory in Ta high grade and T1 tumours, but the scientific evidence is weak. The aim of this study was to valuate the usefulness of a second transurethral resection for high grade non muscle-invasive bladder tumor.

Materials and Methods

From January 2010 to December 2013, 118 patients with high grade non muscle-invasive bladder cancer underwent second TURB at our hospital. First TURB was performed in white light (WL TURB), and was apparently complete and performed until perivesical fat2. None of these patients had adjuvant chemotherapy. A RE-TURB at 6-8 weeks after initial resection was applied to the scar of the first resection and other suspicious lesions in the bladder2. We evaluated the recurrence rate at initial site of resection and the recurrence rate at another site in the bladder. All patients had a follow-up cystoscopy at 3, 6 and 12 month from RE-TURB2.

Results

Of the 118 cases 107 (91%) had no tumors in bladder during RE-TURB and 11 (9%) had tumors; in particular 2 of the tumors were found at others sites in the bladder, instead 9 of the tumors (2 CIS and 7 high grade non muscle-invasive) were found at initial site of resection. Of 9 patients 7 had a cancer bigger than 3 cm at first TURB. The recurrence rate was 3% (2/107) in patients followed at 3 months after RE-TURB, 6% (6/107) in patients followed at 6 months and 9% (10/107) in patients followed at 12 months. In none of the 18 cases, cancer appeared on the scar of first resection at 3-6 and 12 months.

Discussions

Concerning RE-TURB, or second-look TURB, there is a significant disagreement within the scientific community. There is evidence in the literature that a RE-TURB at 6 weeks after initial resection is appropriate to confirm complete resection of the original tumor, to control residual invasive tumor, to detect silent muscle invasion and to provide a better evalutation of clinical stage3,4 . Our findings show that positivity of RE-TURB is very low and only 7 % of the patients had tumor at initial site of resection at RE-TURB and 80% of these had a cancer bigger than 3 cm at first TURB. The absence of muscle in the initial resection specimen is an important risk factor for understaging. Therefore in our opinion, a RE-TURB is mandatory in these cases5. On the other hand, when a complete TURB has been performed until perivesical fat and the muscularis propria is tumor free, we consider that a systematic RE-TURB is not necessary and it is just indicated in selected patients, even more if we consider that the RE-TURB is not exempt from complications. Nowdays, in the “spending review period”, we are wondering if the costs of operatory room for standard RE-TURB at 6 weeks are justified.

Conclusion

A second transurethral resection could be not mandatory in all high grade non muscle-invasive bladder tumor when resection was complete and performed until perivescial fat, particulary when lesion was single (or less than 7 lesions) and lower than 3 cm (EORTC risk tables)6 . Photodynamic diagnosis and narrow band imaging improve non-muscle invasive bladder cancer detection, including carcinoma in situ, enabling more complete resection and fewer residual tumors, but they have the disadvantages of a higher false-positive rate. They can improve bladder cancer detection and characterization, and transurethral resection quality and can further help to reduce RE-TURB positivity at initial site of resection and at another site in the bladder 7-8. Nevertheless a good cost-effectiveness analysis must be carry out about these new technologies.

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18. Photodynamic Diagnosis Of Non Muscle Invasive Bladder Cancer: Preliminary Experience

G. Napodano[1], A. Campitelli[1], T. Realfonso[1], U. Di Mauro[1], M.. Addesso[1], R. Sanseverino[1]
[1] Ospedale Umberto I - ASL Salerno, U.O.C. Urologia (Nocera Inferiore)

Objective

Bladder cancer is one of the most common cancers in the Western world. Despite a better understanding of the disease’s biology, the diagnosis and surgical treatment of NMIBC, based on cystoscopy and Turb, has remained relatively unchanged over the past decades. The WLC Turb outcomes are far from optimal considering that residual tumor rate ranges from 28 to 76% [1-2] and understaging rate ranges from 9 to 49% [3]. It has been demonstrated that second TURB (ReTURB) is a valid tool to improve staging accuracy, recurrence-free and progression-free survival [4-5]. Current EUA and AUA guidelines support Re-TURB for a diagnosis of high grade or T1 bladder cancer. Fluorescence endoscopy was first introduced in the 1960s and subsequently photosensitive drugs where introduced in the 1990s in an attempt to improve quality of diagnosis and surgical tretment of NIMBC. Several studies have demonstrated that Haexaminolevulinate exogenous fluorescence (PDD) offered improved tumour detection, reduced residual tumour rates, and prolonged recurrence-free survival [6]. We report our preliminary experience with PDD, comparing Hexaminolevulinate fluorescence cystoscopy with white light cystoscopy for detecting papillary and flat lesions both in patients with suspected bladder cancer and in patients undergoing ReTurb after primitive T1HG TCC.

Materials and Methods

Patients underwent bladder instillation with Hexaminolevulinate (Hexvix) (85 mg) for 1 hour. Cystoscopy was then performed using standard white light followed by blue light cystoscopy (PDD). Lesions or suspicious areas identified under the two illumination systems were mapped and biopsied for histological examination (cold biopsy or TURB). We compared histological evaluation of lesion detected at WLC and PDD cystoscopy.

Table 1. Group 1: false positive and false negative: per lesion analysis

	WLC	PDD
False positive	6.1% (4/66)	13.6% (9/66)
False negative	22.7% (15/66)	–
New CIS	1	4

Table 2. Group 1: false positive and false negative: per patient analysis

	WLC	PDD
False positive	7.5% (4/53)	15.1% (8/53)
False negative	1.9% (1/53)	–
New CIS	1	4

Table 3. Group 1: reasons for changing prognosis after PDD

	From single to multiple TCC	From <3 to >3 lesions 1	New diagnosis of T1HG 1	New CIS 3	Total pts
PTS (n)	4	1	1	3	9

Table 4. Group 2: false positive and false negative: per lesion analysis

	WLC	PDD
False positive	21.0% (8/38)	18.4% (7/38)
False negative	36.8% (14/38)	–
New CIS	1	4

Table 5. Group 2: false positive and false negative: per patient analysis

	WLC	PDD
False positive	19.0% (8/42)	7.1% (3/42)
False negative	19.0% (8/42)	–
New CIS	1	4

Table 6. Group 2: reasons for changing prognosis after PDD

	PTS (n)
From single to multiple TCC	1
New diagnosis of Dysplasia	1
New diagnosis of T1HG	4
New CIS	3

Results

A total of 95 patients (78 male, 17 female) underwent combined cystoscopy (WL + PPD). Of the patients, 53 had primitive known or suspected bladder cancer (Group 1), while 42 underwent PPD-Returb after primitive T1HG bladder cancer (Group 2). Of Group 1 patients, at WLC cystoscopy, 11 (20.7%) patients had no lesions, 22 (41.5%) had single and 20 (37.8%) had multiple tumours, respectively. Histological evaluation of WLC lesions revealed: inflammation (4 pts), hyperplasia (1), dysplasia (2 pts), TaG1 (16 pts), T1G1 (2 pts), T1G2 (1 pts), T1G3 (9 pts), T1G3 + CIS (2 pts), CIS alone (1 pts), T2G3 (4 pts). PDD cystoscopy revealed 24 suspected areas in 19 patients (35.8%): inflammation (9), hyperplasia (2), dysplasia (2), TaG1 (5), T1G3 (1), CIS (3), T2G3 (2). False negative rate of WLC and false positive rate of PDD were 22.7% and 13.6%, respectively [tables 1-2]. After PDD evaluation, prognosis changed in 9 out of 53 patients (17.0%) [table 3]. 9/Of Group 2 patients,, at WLC cystoscopy, 25 (59.5%) patients had no lesions, 12 (28.6%) had single and 5 (11.9%) had multiple tumours, respectively. Histological evaluation of WLC lesions revealed: inflammation (8 pts), dysplasia (2 pts), TaG1 (1 pts), TaG1 + CIS (1 pts), T1G3 (5 pts). PDD cystoscopy revealed 21 suspected areas in 13 patients (31%): inflammation (7), hyperplasia (1), dysplasia (2), T1G3 (8), CIS (3). False negative rate of WLC and false positive rate of PDD were 36.8% and 18.4%, respectively [tables 4-5]. After PDD evaluation, prognosis changed in 9 out of 42 patients (21.4%)[table 6].

Discussions

Transurethral resection (TURB) is the cornerstone approach in the diagnosis, initial staging and therapy of transitional cell carcinoma (TCC). Ideally, all bladder lesions should be identified and completely removed during WLC Turb. However the rate of residual tumour after TURB of neoplasms ranges from 28% to 76% [1-2]. These outcomes may be the results of limits of WLC Turb, as misdiagnosed tumours and untreated positive margins. Fluorescence endoscopy has been developed to enhance tumor detection by labeling neoplastic cells with drug that generate photoactive compounds. The concept relies on the greater uptake of haexaminolevulinate by neoplastic cells and its reaction to specific light wavelength to generate detectable fluorescence [7]. Recent review has reported that PDD Turb offers higher tumor detection rate, reduced resisual tumor and prolonged recurrence free survival than WLC [6]. In particular, PDD cystoscopy improved the detection of both papillary bladder cancer and carcinoma in situ. Sensitivity for PDD ranged from 92 to 100% and from 93 to 100% for Ta and T1 tumors, respectively, compared with 81-100% and 50-96% of WLC. Moreover, sensitivity of PDD for multiple tumors was 97.8% versus 69.6% of WLC [8]. A meta-analysis by Kausch et al. showed that PDD consent to identify an additional 20% of papillary tumors than WLC alone [9]. In our study, PDD cystoscopy revealed 29 lesions more than WLC in 21 of 95 (22.1%) patients. Particuarly, PDD allowed to identify additional Carcinoma in situ in 6 of 95 (6.3%) patients. Several studies investigated benefit of PDD in the detection of CIS; they reported a CIS detection rate of 49-100% for PDD compared to 5-68% for WLC alone [10-16]. The meta-analysis by Kausch et al. found an 39% advantage in the detection of CIS with PDD over WLC [9].

The main limit of PDD is low specificity (43-82%) due to false positive rate. In 8 trials false positive rate was 7-47% for PDD versus 9-62% for WLC [13,14, 17-22]. In all these trials except one [21], false-positive rate was higher for PDD than WLC . False positive results are related to flogosis due to a recent TURB, previous BCG bladder instillation and urinary tract infection [23-24]. In our experience, false positive rate was 11.6%. After PDD evaluation, prognosis and treament planning changed in 18 out of 95 patients (19%). However, a longer follow up and larger series of patients are essential to demonstrate whether PDD can offer an advantage in the management of these patients in terms of recurrence and progression

Conclusion

Transurethral resection (TURB) is the cornerstone approach in the diagnosis, initial staging and therapy of transitional cell carcinoma.. However WLC Turb outcomes are far from optimal considering that residual tumor rate ranges from 28 to 76%. Hexaminolevulinate fluorescence cystoscopy can be used in conjunction with white light cystoscopy to improve detection of bladder cancer. Several studies have demonstrated that Haexaminolevulinate exogenous fluorescence (PDD) offered improved tumour detection, reduced residual tumour rates, and prolonged recurrence-free survival. In our preliminary experience, PDD cystoscopy allowed to identify at least one more tumor than WLC in approximately a third of the patients. After histological evaluation, prognosis changed in 19% of patients. Whether this would translate to better outcomes in terms of recurrence and progression free survival has yet to be determined.

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Lunedì 25 maggio

Sala C

15:30 -17:30

Moderatori:
A. Samuelli
Giovanni Zarrelli

Video 6

Neoplasie del Rene

1. Utilizzo Dell'ecografia Laparoscopica Nell'esecuzione Di Nefrectomia Parziale Per Massa Intra-Renale

B. Azizi[1], W. Giannubilo[1], C. Vecchioli[1], M. Diambrini[1], A. Garritano[1], V. Ferrara[1]
[1] Ospedale Carlo Urbani, U.O. Urologia (JESI)

In questo video viene mostrata l'assoluta utilità dell'ecografia laparoscopica in corso di asportazione di una massa intra-renale.
Paziente di 60 anni, riscontro incidentale di una massa meso-renale, non esofitica di 3,2 cm renale destra.
Per via trans-peritoneale si è proceduto ad isolamento del rene. Quindi, dopo aver individuato con precisione la lesione grazie all'utilizzo della sonda ecografica laparoscopica e alla sua notevole maneggevolezza e versatilità, si è proceduto ad una enucleazione della massa, peraltro molto vicino alla via escretrice.
Quindi si è proceduto a sutura della breccia renale in Vicryl 2/0 (tecnica sliding clips).
Il tempo operatorio è stato di 95 min e le perdite ematiche trascurabili.
L 'utilizzo della sonda ecografica intra-operatoria laparoscopica risulta di grande aiuto nei casi in cui la neoplasia, non essendo esofitica, risulta difficilmente identificabile.

2. Partial Nephrectomy For Bilateral Renal Cancer: Case Report

R.. Sanseverino[1], U. Di Mauro[1], O. Intilla[1], G. Molisso[1], T. Realfonso[1], C. Papa[2], G.. Napodano[1]
[1] Ospedale Umberto I - ASL Salerno, U.O.C. Urologia (Nocera Inferiore)
[2] Ospedale Umberto I - ASL Salerno, U.O.C. Anestesia e Rianimazione (Nocera Inferiore)

Video shows a case of a patient who underwent a two-stage LPN for bilateral renal cancer: a right mesorenal (42 mm) and a left hilar (38mm) lesions. RENAL score of tumours was 8p and 9p, respectively. Renography revealed a GFR 77 ml/min (right 40 ml/min; left 37 ml/min). Patient underwent two surgical procedures. In the first, a right transperitoneal approach was performed; the tumour is identified. The renal artery was clamped with bull dog. The tumour was excised. Renorraphy was performed with Vicryl™ sutures secured with Hem-O-lock clips. The artery was unclamped. A Floseal™ was applied on the resected renal surface. In the second procedure, a left transperitoneal approach was performed; the tumour is identified. The renal artery was clamped with bull dog. The tumour was excised. Renorraphy was performed with Vicryl™ sutures secured with absorbable clips. The artery was unclamped. A Floseal™ was applied on the resected renal surface. Warm ischemia time of both procedures was 20 and 23 minutes, respectively. No postoperative complications occurred. Histological evaluation revealed RCC (pT1b and pT1a). Bilateral laparoscopic partial nephrectomy is a feasible procedure that allows a good oncological control of bilateral synchronous renal cancer

3. Tumorectomia Laparoscopica Con Clampaggio Selettivo Per Massa Renale Sx Di 7 Cm

P. Parma[1], A. Samuelli[1], G. Lupi[1]
[1] Ospedale Carlo Poma (Mantova)

Si presenta il video di una tumorectomia laparoscopica retroperitoneale sx per una massa di 7 cm con clipaggio selettivo di un ramo arteriososo diretto alla neoformazione

Materiali e Metodi:
maschio di 69 anni con riscontro incidentale di neoformazione polare inferiore del rene di sx di 7 cm parzialmente esofitica.Posizionamento di 4 trocar retroperitoneali aperura della fascia di Gerota, isolamento delll'uretere e del peduncolo vascolare renale .Si identificano due rami arteriosi principali. Si isola la massa polare inferiore che viene successivamente demarcata.Isolamento dell'ilo renale identificando 3 rami che partono dalla arteria principale inferiore, due dei quali convergono nella massa renale polare inferiore. Si clippano con Hemolock in modo selettivo i 2 rami arteriosi inferiori della arteria renale principale inferiore. Enucleazione della massa renale. Emostasi del letto di resezione con doppia sutura in continua della midollare e applicazione di un patch large di Tachosil.

Risultati:
Il tempo operatorio è stato pari a 150 minuti. Le perdite ematiche intraoperatorie sono state pari a 150 ml.
Il decorso post operatorio regolare

Conclusioni:
Quando possibile il clampaggio selettivo o super selettivo di un ramo dell'arteria renale permette di eseguire in sicurezza la enucleazione di masse renali complesse con minimo danno sul parenchima renale sano.

4. Enucleoresezione Robotica Di Neoplasia Renale Sinistra Totalmente Endofitica In Rene Unico

A. Serao[1], F. Cortese[1], P. Vota[1], D. Tiranti[1], P. Audino[1], M. Ferraro[1]
[1] Azienda Ospedaliera SS Antonio e Biagio (Alessandria)

Il video mostra una enucleoresezione robotica di una neoplasia renale sinistra, totalmente endofitica, in rene unico, con asssitenza ecografica intraoperatoria. Il paziente di anni 55, aveva subito nel 2003 una nefrectomia radicale destra per un carcinoma a cellule chiare pT2 G2. La neoformazione renale sinistra era nota dal 2009 , riscontratta nel follow-up oncologico, quando aveva dimensioni di 13 mm. Dimostrando agli esami successivi un accrescimento lento ma progressivo, fino a raggiungere nel 2014 dimensioni di 2 cm, fu sottoposta a biopsia percutanea. L'esame istologico evidenziava un carcinoma a cellule chiare G1.Fu deciso pertanto un'asportazione robotica conservativa della neoformazione.Alla valutazione "nephron score" il punteggio era 9x. Trattandosi di una neoplasia totalmente endofitica fu necessario avvalersi dell'ecografia intraoperatoria per valutarne con esattezza la collocazione (terzo medio) e la profondità. L'intervento non ha avuto complicanze intraoperatorie e il decorso post operatorio è stato regolare con rapido ripristino della normalità clinica. L'esame istologico definitivo ha messo in evidenza un carcinoma renale a cellule chiare di 2 cm, pT1a G1. Una tac eseguita a sei mesi di distanza ha dimostrato assenza di malattia. La funzionalità renale attuale è nella norma.

5. Crioterapia Nel Trattamento Dei Tumori Renali: Approccio Laparoscopico E Percutaneo Eco-Guidato

W. Giannubilo[1], B. Azizi[1], C. Vecchioli[1], A. Garritano[1], M. Diambrini[1], V. Ferrara[1]
[1] Ospedale Carlo Urbani, U.O. Urologia (JESI)

Negli ultimi anni si è assistito allo sviluppo e alla diffusione di molti approcci conservativi nel trattamento delle neoplasie renali. Tra queste la crioablazione che consente il trattamento conservativo nelle lesioni renali sincrone, bilaterali, nelle lesioni peri-ilari e/o quando un trattamento chirurgico radicale risulta fortemente a rischio per il paziente per la presenza di comorbilità severa.Nel video presentiamo il caso di una paziente mono-rene chirurgica con 5 masse renali sincrone. La paziente in questione è stata trattata in 2 tempi. Per via laparoscopica trans peritoneale è stata sottoposta a crioablazione di 4 delle 5 masse renali. Una delle masse, molto posteriore è stata trattata in un momento successivo per via percutanea sotto guida ecografica e in anestesia locale.

6. Tumorectomia Renale: Nostra Esperienza

W. Giannubbilo[1], B. Azizi[1], C. Vecchioli[1], M. Diambrini[1], A. Garritano[1], V. Ferrara[1]
[1] Ospedale Carlo Urbani, U.O. Urologia (Jesi)

È attualmente ancora molto dibattuto in ambito laparoscopico sui vantaggi e i rischi di una tumorectomia per l'asportazione di una massa renale a fronte della enucleoresezione. Nel video mostriamo la tecnica da noi utilizzata per eseguire la tumorectomia renale. Usualmente la ns. tecnica non prevede l'isolamento del peduncolo renale né il suo clampaggio ("zero ischemia"). L'asportazione della massa renale viene eseguita per via retro o trans peritoneale, a seconda della sede della neoplasia, con forbici a freddo. L' emostasi intra-operatoria viene assicurata con l'utilizzo di correnti mono/bipolari in corso di resezione soprattutto su piccoli vasi arteriosi. Mentre per il letto di resezione si ricorre al Floseal secondo lo schema classico, ovvero, dopo averlo apposto sul tessuto viene compresso su questo tramite una garza bagnata per circa 3 minuti. Usiamo

punti di accostamento a scopo emostatico, solo nel caso di resezioni a larga base d'impianto (oltre i 4 cm.), ma nel caso di resezioni a cuneo. Nel caso di masse renali interessanti la via escretrice posizioniamo pre-operatoriamente uno stent doppio "J"

7. Enucleazione Laparoscopica Transperitoneale Di Duplice Neoplasia In Monorene Chirurgico Sinistro

A. Polara[1], L. Aresu[1], S. Grosso[1], G. Grosso[1]
[1] Casa di Cura Pederzoli (Peschiera del Garda)

Descriviamo il trattamento laparoscopico di due neoformazioni in monorene chirurgico sinistro in paziente di sesso maschile di 44 anni, sottoposto 4 anni prima a nefrectomia destra per renal clear cell carcinoma. La stadiazione preoperatoria è stata eseguita mediante RM addome completo, con identificazione di due neoformazioni, una al terzo medio del rene, sita al margine convesso-anteriore, parzialmente esofitica, dal diametro di 2.5 cm (PADUA SCORE 8); la seconda, interamente endofitica, sita al labbro anteriore sul margine mediale del terzo medio-inferiore dell'organo,dal diametro di 3 cm (PADUA SCORE 9), in assenza di segni di infiltrazione della vie escretrice in entrambi i casi. Nel video si descrive la preparazione dell'organo, l'identificazione dell'ilo, l'identificazione delle due neoformazioni, l'enucleazione della lesione superiore con forbici e bipolare ed emostasi sul letto di resezione; l'enucleazione della neoformazione più caudale è seguita da sliding suture. I tempi operativi sono stati di 120 minuti, con perdite ematiche di 200 ml. I valori di creatininemia preoperatori (0.9), sono rimasti invariati nelle due giornate postoperatorie. Il paziente è stato dimesso in seconda giornata postoperatoria, l'esame istologico delle due neoformazioni è esitato in RCC ISUP 2, margini di resezioni indenni. Follow-up RM addome a 4 mesi negativo per recidive.

8. Asportazione Di Grossa Massa Surrenalica Destra Per Via Laparoscopica Intra-Peritoneale

B. Azizi[1], W. Giannubilo[1], C. Vecchioli[1], A. Garritano[1], M. Diambrini[1], V. Ferrara[1]
[1] Ospedale Carlo Urbani, U.O. Urologia (Jesi)

Nel seguente video mostriamo il caso di una grossa massa surrenalica destra, diagnosticata ecograficamente in seguito a sintomatologia algica lamentata dal paziente. La massa di 18 x 21 cm è stata asportata per vaia laparoscopica intra-peritoneale. Il pezzo è stato estratto all'interno di endo-bag attraverso una incisione cutanea di circa 8 cm. Il tempo operatorio è stato di 140 min. 220 cc le perdite ematiche. Il paziente è stato dimesso in III giornata post operatoria. In conclusione, come per le masse renali, anche per il surrene le dimensioni della massa non rappresentano in assoluto una controindicazione alla tecnica laparoscopica, a fronte di una tecnica dagli indubbi vantaggi in termini di dolore post operatorio, perdite ematiche e recupero più precoce.

9. Autotrapianto Di Rene Dx Con Prelievo Laparoscopico 3D Del Rene Per Grossolano Aneurisma Dell'arteria Renale

L. Di Clemente[1], F. Pisani[1], G. Bafile[1], G. Romano[1], G. Ranieri[1], B. Di Pasquale[1]
[1] ASL 1 L'Aquila, Avezzano, Sulmona (L'Aquila)

Nel video mostreremo un autotrapianto di rene dx, per grossolano aneurisma dell'arteria renale, con prelievo laparoscopico del rene. Il Paziente di 57 anni, con diagnosi ecografica di neoformazione surrenalica dx, è stato sottoposto a TC che mostrava la presenza di un aneurisma dell'arteria renale dx di 30 mm. Il prelievo è stato eseguito con accesso laparoscopico trans peritoneale con l'isolamento preliminare dell'uretere e dei vasi del peduncolo renale dx dove la vena era particolarmente adesa oltre che dislocata dall'aneurisma . Preparazione dell'accesso inguinale dx per il trapianto evitando l'apertura del peritoneo. Sezione dell'uretere all'incrocio con i vasi iliaci, dell'arteria renale in prossimità dell'emergenza dall'aorta dopo posizionamento di hemolock e della vena renale all'emergenza dalla cava con endogia. Estrazione del rene con l'ausilio di endobag dall'incisione inguinale. Perfusione con 500 cc di liquido Celsior e preparazione su banco del rene. Aneurismectomia, sezione di un tronco arterioso efferente dall'aneurisma e ricostruzione del ramo principale dell'arteria renale con l'arteria efferente con punti in prolene 5-0. Anastomosi termino laterale in prolene 6-0 dell'arteria e a seguire della vena renale con i vasi iliaci esterni. Anastomosi uretero-vescicale sec Lich-Gregoire

10. Symptomatic And Complicated Primary Obstructive Megaureter In 18 Y.O. Caucasian Male Patient: Laparoscopic Approach

A.L. Pastore[1], G. Palleschi[1], L. Silvestri[1], A. Ripoli[1], A. Fuschi[1], A. Leto[1], Y. Al Salhi[1], S. Al Rawashdah[1], D. Autieri[1], A. Carbone[1]
[1] Università "La Sapienza" di Roma, Facoltà di Farmacia e Medicina, Dipartimento di Scienze e Biotecnologie Medico-Chirurgiche, U.O.C. Urologia (Latina)

An 18-year-old male patient with no previous history of surgery and no comorbidities, was diagnosed with severe right hydroureteronephrosis after the admission to our hospital for fever, right flank pain and leucocytosis. Renal dynamic scan showed a reduced functioning right kidney with a split function of 28%. Computed tomography scan demonstrated a marked dilation of the right pelvicaliceal system with reduced thickness of the renal parenchyma associated with a megaureter with radiological appearance of "Low Narrow Tapering Sign" suggestive of Primary Megaureter. The left kidney had a normal anatomy and function. The patient was admitted for laparoscopic ureteral reimplantation with intracorporeal tailoring of the medial and distal parts.
The operative time was 210 minutes. Blood loss was minimal. A tubular vacuum drain was left for 48 hours. The Foley catheter was removed on the third postoperative day and the patient was discharged from the hospital 5 days after surgery. Follow-up ultrasonography and intravenous urography 1 month later confirmed good drainage combined with a significant reduction in hydroureteronephrosis.

11. Totally Intracorporeal Laparoscopic Radical Cystectomy With Modified Ileal Padua Neobladder Recostruction In Male. Surgical Approach Evolution And Outcomes

G. Palleschi[1], A.L. Pastore[1], A. Ripoli[1], L. Silvestri[1], Y. Al Salhi[1], D. Autieri[1], A. Leto[1], S.F.. Al Rawashdah[1], A. Fuschi[1], A. Carbone[1]
[1] Università "La Sapienza" di Roma, Facoltà di Farmacia e Medicina, Dipartimento di Scienze e Biotecnologie Medico-Chirurgiche, U.O.C. Urologia (Latina)

Aim of the present study is to report our 1 year experience on the results of totally intracorporeal laparoscopic radical cystectomy (LRC) with orthotopic urinary diversion in 5 Caucasian males. The LRC procedure is started by establishing a pneumoperitoneum and the insertion of two 5 mm, two 10 mm trocars and one Hasson 12 mm trocar. Radical cysto-prostatectomy is performed using the 5 mm ligasure. Bilateral standard lymphadenectomy was performed. Urinary diversion is configured as a modified ileal padua neobladder reconstruction selecting 40 centimeters of the ileum. 25 cm are used for the left arm and 15 cm are used for the right arm. The posterior plate of the neobladder is made using a 45mm long automatic stapler. The remaining neobladder configuration is made with absorbable 3-0 running suture. The mean

operative time was 414 ± 27 minutes, the mean blood loss was 249.69 ± 95.59 milliliters, the mean length of hospital stay was 9.62 ± 2 days and the mean morphine requirement was 3.54 ± 0.7 days. The overall complication rate was 60% (3/5). However, the majority of the patients had minor complications with mini-invasive re-intervention needed.

12. Robot- Assisted Urinary Undiversion From Orthotopic Neobladder To Ileal Conduit

G. Simone[1], R. Papalia[2], M. Ferriero[3], S. Guaglianone[3], R. Mastroianni[3], G. Tuderti[4], M. Gallucci[3]
[1] Istituto Nazionale Tumori "Regina Elena", Ospedale San Giovanni Bosco (Roma, Torino)
[2] Istituto Nazionale Tumori "Regina Elena", Università Campus Biomedico (Roma)
[3] Istituto Nazionale Tumori "Regina Elena" (Roma)
[4] Istituto Nazionale Tumori "Regina Elena", Università "Sapienza" di Roma (Roma)

To describe the technique of Robot-assisted laparoscopic undiversion from a orthotopic ileal neobladder to an ileal conduit. We report a case of a female patient who previously underwent radical cystectomy and orthotopic ileal neobladder affected by recurrent urinary tract infections and urolithiasis of the distal right ureter. The video highlights surgical steps of neobladder removal and ileal conduit configuration with a Wallace uretero-ileal anastomosis. Mean operative time was 180 minutes, intraoperative blood loss was 100 ml, perioperative course was uneventful. Robot- assisted laparoscopic undiversion from an orthotopic ileal neobladder to an ileal conduit is a challenging but technically feasible procedure.

Lunedì 25 maggio

Sala D

15:30 -17:30

Discussione poster digitali 3

Urology Fusion

Moderatori:
Alessandro Giacobbe
Clemente Meccariello
Beatrice Vezzù

1. Partial Versus Radical Nephrectomy For Clinically Organ Confined Clear Cell RCC

G. Simone[1], R. Papalia[1], M. Ferriero[1], L. Silvestri[2], S. Guaglianone[1], R. Mastroianni[1], M. Costantini[1], G. Tuderti[3], M. Gallucci[1]
[1] Istituto Nazionale Tumori "Regina Elena" , U.O. Urologia (Roma)
[2] Università "Sapienza" di Roma, U.O. Urologia, Dipartimento di Scienze e Biotecnologie Medico-Chirurgiche, ICOT, Polo Pontino (Latina)
[3] Istituto Nazionale Tumori "Regina Elena" , U.O. Urologia, Università "Sapienza" di Roma (Roma)

Introduction & Objective:
Partial Nephrectomy (PN) has become a standard of treatment for cT1 renal tumors. However, few studies compared the oncologic outcomes of PN and radical nephrectomy (RN) for pT2-3a clear cell renal cell carcinoma (cc-RCC). In this study we compared cancer-specific survival (CSS) of PN and RN performed in patients with pT1-pT3a-pNx cc-RCC.

Materials and Methods:
Data were prospectively collected in an institutional "renal surgery" database from 2001 to 2013. Out of 1650 cases, 921 were cc-RCC and 654 patients met inclusion criteria (cT<3-cN0-cM0 and pT1a-pT3a-pNx), 252 of which treated with RN and 402 with PN. A stage specific analysis comparison of oncologic outcomes between PN and RN was performed.

Results:
Patients treated with RN had larger tumors (p<0.001), higher pT stages (p<0.001) and higher incidences of Fuhrman G3-4 (p=0.004) (Table 1). At log rank test CSS was not different between PN and RN group (p=0.926; Figure 1).
After stratifying for pT substages PN and RN groups displayed comparable CSS for pT1 (p=0.554) as well as for pT2-3a cc-RCC (p=0.398) (Figure 2). Similarly, both for Fuhrman grade 1-2 and for grade 3-4 cc-RCC, PN did not undermine CSS probability

(p=0.991 and p=0.734, respectively).

Conclusions:
CSS probabilities for cT<3-N0-M0 cc-RCC were not dependent on surgical approach. PN is an oncologically effective approach also for pT2 and pT3a cc-RCC.

2. Oncologic Outcomes After Partial Nephrectomy Without Hilar Clamping

R. Papalia[1], G.. Simone[2], M. Ferriero[3], R. Mastroianni[3], M. Costantini[1], V. Pompeo[3], S. Guaglianone[3], G. Muto[4], M.. Gallucci[3]
[1] Università Campus Biomedico, Istituto Nazionale Tumori "Regina Elena" (Roma)
[2] Istituto Nazionale Tumori "Regina Elena", Ospedale San Giovanni Bosco (Roma, Torino)
[3] Istituto Nazionale Tumori "Regina Elena" (Roma)
[4] Università Campus Biomedico (Roma)

Introduction And Objectives:
The aim of the study is to report intermediate and long-term oncologic outcomes of zero ischemia partial nephrectomy, to make specific conclusions about the oncologic efficacy of the procedure.

Methods:
We performed a chart review of 790 patients who had undergone ZIPN since January 2001; patients with a minimum of 2 yr of follow-up were included in this study. Length of follow-up was calculated from the date of surgery to the date of last clinical follow-up. The intervention adopted was open, laparoscopic and robot-assisted partial nephrectomy without hilar clamping. The Kaplan-Meier method was used to calculate overall survival, cancer specific survival and disease-free survival.

Results:
Of 790 renal masses, 583 were malignant tumours. In this cohort, all the patients had a minimum follow up of 2 yr with 139 who had a minimum of 5 yr. The mean age was 60.2(±13.4) yr, body mass index was 26.4(±2.9) kg/m(2), and Charlson comorbidity index score was 3.9±1.8. The mean tumor size on computed tomography scan was 4.0(±2.1) cm, RENAL score was 8.1±1.3, estimated blood loss (EBL) was 191±119 ml, operative time was 60±19 min. No intraoperative complications were detected while 17 high-grade Clavien postoperative complications (2.9%) occurred. Patients stayed on average for 4.5±1.6 days in the hospital, and the median follow-up was 4 yr. OS was 98.2% at 5yr; DFS for the malignant cohort was 91.6% at 3 yr and 90.7% at 5 yr; CCS was 98.5% at 5 yr as projected by the Kaplan-Meier method. Renal recurrence was observed in 16 patients (2.7%). The mean preoperative GFR was 81.9±22.1ml/min per 1.73m^2; the latest postoperative GFR was 71.1±17.4 ml/min per 1.73m^2. No patient required to start dialysis.

Conclusions:
This study affirms that ZIMIPN is effective in oncologic control at an intermediate and long-term followup interval.

3. Multi-Center Analysis On Pre-Operative Predictors Of Margin, Ischemia And Complications (Mic) After Laparoscopic Partial Nephrectomy (Lpn)

S. Ricciardulli[1], R. Napoli[1], Q. Ding[2], H. Li[2], D. Viola[1], M. Spagni[1], S. Spatafora[1], A. Celia[3], X. Zhang[4], F. Bergamaschi[1]
[1] Arcispedale Santa Maria Nuova, U.O. Urologia (Reggio Emilia)
[2] PLA Generale Hospital, Department of Urology (Beijing)
[3] Ospedale San Bassiano, U.O. Urologia (Bassano del Grappa)
[4] PLA General Hospital, Department of Urology (Beijing)

In 2012 Buffi et al proposed a new score system to evaluate success in PN, the Margin, Ischemia and Complications (MIC). According to this newly proposed scoring system, an optimal partial nephrectomy (PN) is accomplished when surgical margins (SM) are negative, warm ischemia time (WIT) was ≤20 minutes and no major complications (Clavien-Dindo grade 3-4) were observed. Aim of this study is to evaluate pre-operative factors that may potentially influence this scoring system.This is a retrospective multi-centers study on LPN performed beetween January 2012 and September 2014. Spearman Rank Order Correlation (Rho) was used to evaluate the relationship between clinical patients characteristics with MIC score.The relationship was defined as small (rho= 0.10 to 0.29), medium (rho= 0.30 to 0.49) and large (rho= 0.50 to 1).A binary regression analysis was done in order to evaluate pre-operative independent factors related with MIC success.A total of 316 patients were enrolled in this study.We found in Spearman correlation that median tumor size (rho: -0.170 p-value: 0.002), median PADUA score (rho: -0.179; p-value: <0.001), PADUA risk groups (rho: -0.191; p-value: <0.001), renal rim (rho: -0.113; p-value: 0.044), renal sinus (rho: -0.154; p-value: 0.006), urinary collecting system (UCS) (rho: -0.170; p-value: 0.002) and tumor size coded as categorical variable (rho: -0.152; p-value: 0.007) were inversely related with MIC score system. Low point assigned to each PADUA anatomical features presented high probability of MIC success. In the binary logistic regression, clinical tumor size (p-value: <0.001; OR: 0.829; 95% CI: 0.697-0.987), PADUA score(continuosly coded) (p-value: <0.001; OR: 0.843; 95% CI:0.740-0.960) and PADUA risk groups (low: reference; intermediate: p-value: <0.001; OR: 0.416; 95% CI: 0.238-0.792; high: p-value: <0.001; OR: 0.356; 95% CI: 0.199-0.636) were independently related with MIC success.The MIC score is influenced by several anatomical aspects and the use of nephrometry score is useful to predict MIC success.

4. Functional & Trifecta Outcomes In Solitary Kidney: Unclamped Vs Clamped Partial Nephrectomy

R.. Papalia[1], G. Simone[2], A.. Luìs de Castro Abreu[3], I. Gill[3], M. Ferriero[4], R.. Mastroianni[4], K. Wong[3], R. Azhar[5], R. Satkunasivam[3], C. Metcalfe[3], O. Ukimura[3], M. Aron[3], M. Desai[3], G. Muto[6], M.. Gallucci[4]
[1] Università Campus Biomedico, Istituto Nazionale Tumori "Regina Elena" (Roma)
[2] Istituto Nazionale Tumori "Regina Elena", Ospedale San Giovanni Bosco (Roma, Torino)
[3] University of Southern California (Los Angeles)
[4] Istituto Nazionale Tumori "Regina Elena" (Roma)
[5] University of Southern California (Los Angekes)
[6] Università Campus Biomedico (Roma)

Introduction And Objectives:
To assess renal functional and trifecta outcomes of clamped versus unclamped minimally invasive partial nephrectomy in patients with a solitary kidney.

Methods:
We retrospectively analyzed data of 129 patients undergoing PN in solitary kidney at 2 high-volume referral centers (1999-2014). PN was performed either by clamped technique or by unclamped technique. Trifecta after PN was achieved when eGFR

decreased <10% from baseline, cancer margins were negative and there were no urological complications.

Results:
CC-PN and UC-PN were performed in 64 and 65 patients, respectively. Mean tumor size (3.4 vs 3.9 cm, p=0.13) and baseline eGFR (60 vs 57, p=0.34) were similar between groups. Robotic PN was more frequent in the UC-PN (17% vs 69%, p<0.001). UC-PN patients had shorter mean warm ischemia time (WIT; 24 vs 0 min, p=<0.001) and operative time (4.3 vs 3.7 hrs, p=0.04). Perioperative outcomes were similar between CC-PN vs UN-PN groups: mean estimated blood loss (514 vs 285 cc, p=0.40), hospital stay (7.4 vs 4.9 days, p=0.86) and transfusion rate (28% vs 15 %, p=0.09). Overall complications trended to be lower for UN-PN (36% vs 20%, p=0.051), however urological complications were similar (11% vs 8%). Mean eGFR decrease was 30% for CC-PN vs 6% for UN-PN p<0.0001). Similarly, in the UCPN cohort, more patients maintained pre-operative eGFR (22% vs 64%, p<0.0001) and fewer patients had new-onset CKD stage 3 (33% vs 6%, p<0.001). Trifecta outcomes were more common in the UC-PN cohort (20% vs 69%, p<0.0001). On univariate analysis baseline eGFR, WIT and UN-PN were predictors for achieving Trifecta. On multivariate analysis, UN-PN predicted for Trifecta. Main limitation is retrospective analysis and small number of patients.

Conclusions:
In the solitary kidney setting, unclamped PN conferred superior functional and Trifecta outcomes compared to clamped PN.

5. Propensity Score Matched Analysis Of Cancer-Specific Survivals Between Papillary Type-2 Versus Clear-Cell Renal Cell Carcinoma

G. Simone[1], R. Papalia[2], M. Ferriero[1], L. Silvestri[3], M. Costantini[1], R. Mastroianni[1], S. Guaglianone[1], M. Gallucci[1]
[1] Istituto Nazionale Tumori "Regina Elena", U.O. Urologia (Roma)
[2] Università Campus Biomedico, Divisione Urologia (Roma)
[3] Università "Sapienza" di Roma U.O. Urologia - Dipartimento di Scienze e Biotecnologie Medico-Chirurgiche, Polo Pontino, ICOT, (Latina)

Introduction & Objective:
Clear-cell and Papillary are the most common variant of renal cell carcinoma (RCC). Among papillary RCCs, type-2 papillary (p2)-RCC tends to present with more advanced stage and to have an aggressive behavior compared to type 1 papillary RCC. The objective of this study was to compare cancer-specific survival (CSS) in p2-RCC and matched patients with clear-cell renal cell carcinoma (cc-RCC).

Materials and Methods:
Fifty-five (5.6%) patients with p2-RCC and 975 cc-RCC patients were identified within a prospectively maintained institutional dataset of 1250 patients treated with either radical or partial nephrectomy for renal cancer. Univariable and multivariable Cox analyses were performed to address the prognostic role of age, gender, histologic subtype, surgical treatment, tumor size, pT, pN and cM stages, sarcomatoid features and surgical margins on CSS. Subsequently, 110 cc-RCC cases were selected with a propensity score match and a Kaplan Meier analysis was performed to compare survival outcomes of 55 p2-RCC cases with that of 110 cc-RCC cases.

Results:
Distribution of demographic, clinical and pathological data between the two groups was compared and data were summarized in Table 1. At multivariable Cox analysis, age (p=0.031), pT≥2 (p<0.001), pN≥1 (p=0.001), cM1 (p<0.001) and tumor histology were independent predictors of CSS. There were no significant differences in the distribution of demographic and pathologic variables between the two groups of 55 p2-RCC and 110 cc-RCC selected for matched comparison. (Table 1) After matching, CSS of p2-RCC was significantly different than that for cc-RCC patients (Figure 1; log-rank p=0.039).

Conclusions:
In our series p2-RCC presented as more aggressive disease compared with cc-RCC patients and, after adjusting for significant covariates, p2RCC displayed lower CSS than cc-RCC cases.

6. Use Of The New Endowrist Needle-Drivers In Single Site Robotic Pyeloplasty: Evaluation Of The Pro & Contra During The First 2 Cases Performed In Our Centre

L. Topazio[1], D. Autieri[1], S. Khorrami[1], V. Giommoni[1], T. Verdacchi[1], M. De Angelis[1], F. Annino[1]
[1] U.O.C. Urologia – Ospedale San Donato A.U.S.L. 8 (Arezzo)

Introduction
A major drawback of Robotic Single Site Pyeloplasty is the presence of semi-rigid instruments with great limitations in the degrees of movement. To overcome this problem Intuitive Surgical (Sunnyvale CA) has recently developed a new Wristed Needle Driver for Single Site Surgery aimed to facilitate suturing. We describe the first two cases of Robotic Single Site Pyeloplasty performed in Italy using the new EndoWrist Needle Driver for Single Site Surgery.

Case Presentation
In February 2015 two Patients underwent Robotic Single Site Pyeloplasty performed using this device. Mean operative time was 160 min (IQR 150-170), mean single port positioning time was 12.5 min (IQR 10-15) and mean docking time was 11.5 min (IQR 11-12). Estimated blood loss was not significant in both cases. Hospital stay was 2 days in both cases. No complications occurred during surgery and in the early post-operative days. Follow-up is 3 months with no late complications reported.

Discussion
We noticed that this new device can be useful by facilitating suturing, as the surgeon can move the instrument tip up to 45 degrees in all directions, and by its possible use as a forcep for dissection and tissue manipulation thanks to its greater handiness with respect to standard instruments for single-site surgery. The only disadvantage noticed in these cases is the presence of a slight tremor in fine movements probabily due to the collision of the needle driver with the rigid curved cannulae.

Conclusion
Our impression is that the new Endowrist needle driver represents a very useful device in improving the surgeon's ease of suturing and instruments' movements thus reducing the drawbacks of Single Site Surgery and making this more reproducibile. This is the first step to make Single Site more similar to Multi Port Surgery and to its widespread use not only limited to Pyeloplasty.

7. Complementary Value Of Contrast-Enhanced Ultrasound (CEUS) After Contrast-Enhanced Computed Tomography (CECT) In Evaluation Of Indeterminate Small Hypovascular Renal Masses

G.C. Rocca[1], M. Tilli[2], C. Ballista[1], M. Bernabei[1], S. Dall'ara[2], G.. Stela[2], G. Benea[2], M. Simone[1]
[1] Ospedale del Delta AUSL Ferrara, U.O. Urologia (Lagosanto)
[2] Ospedale del Delta AUSL Ferrara, U.O. Radiologia (lagosanto)

Purpose:
To assess the value of contrast-enhanced ultrasonography (CEUS) in the characterization of indeterminate small renal masses (SRM) seen on contrast-enhanced CT (CECT) and its promising role in diagnostic algorithm.

Materials and Methods:
From January 2011 to September 2014, 66 consecutive patients (age range, 45-86 years; 38 men, 28 women) with SRM (< 4 cm) underwent renal surgery, after preoperative CECT for lesion characterization and treatment planning. Thirtyfive patients with hypervascular lesions at CECT were submitted to surgery with no additional imaging examination. CECT findings demonstrated

indeterminate characteristics of SRM in 31 patients, with pseudo-enhancement or unclear endolesional vascularization. These patients underwent CEUS to evaluate real-time lesional wash-in in order to better define their further management (surgery or follow-up).

Results:
Twentythree out of 31 patients showed contrast enhancement wash-in into the lesion and therefore underwent surgery. Pathologic findings confirmed malignancy in 19 patients (3 clear cell carcinoma, 14 papillary renal cell carcinoma, 2 cromophobe) and benign lesions in 4 patients (2 oncocytoma, 2 angiomyolipoma, 1 emorrhagic cysts). Nine lesions with no clear enhancement at CEUS are currently under follow-up (CEUS and MRI) with no evidence of modified pattern (median follow-up 15 months) representing complicated cysts Bosniak II.

Conclusions:
CEUS can be an useful tool to determinate real-time enhancement in SRM, especially for tumors with indeterminate pattern at CECT. Contrast-enhanced ultrasonography is very sensitive in detecting slight tumor blood flow, facilitating the evaluation of tumor perfusion by analyzing tumor vascular enhancement patterns. The promising role of CEUS should be considerated in newer diagnostic algorithms of SRM management, also as problem solving in undeterminate findings at CECT or MRI.

8. Impact Of Primary Histology On Disease Free Survival After Minimally Invasive Adrenalectomy For Metastatic Cancer

M. Ferriero[1], G. Simone[1], R. Papalia[2], R. Mastroianni[2], S. Guaglianone[1], M. Gallucci[1]
[1] Istituto Nazionale Tumori "Regina Elena", U.O. Urologia (Roma)
[2] Università Campus Bio Medico, Unità di Urologia (Roma)

Introduction And Objectives:
The adrenal gland is a site of metastasis for several malignancies. Metastasectomy with the achievement of a no evidence of disease (NED) status demonstrated to positively impact the oncological outcome. We report oncological results of a single centre 10-year experience with minimally invasive adrenalectomy for isolated adrenal metastasis.

Methods:
From May 2004 to May 2014, 162 patients underwent laparoscopic or robotic adrenalectomy. Pathological examination showed a metastasis in 36 patients. Baseline demographics, perioperative and follow up data were prospectively collected. Univariable and multivariable cox regression analyses were performed to identify predictors of disease free survival (DFS).

Results:
Median follow up was 28 months. Tumor histology was renal cell carcinoma (RCC) in 27 patients (75%). (Table 1) At univariable analysis bilateral adrenalectomy and primary tumor histology were predictors of DFS (p=0.048 and p=0.003, respectively). At multivariable cox analysis the only independent predictor of DFS was primary tumor histology (p=0.008). Lung cancer displayed similar DFS compared to RCC (reference category), while colon cancer (p=0.021; HR 7.08 [95% CI 0.96-1.28]), bladder cancer (p=0.001; HR102.6 [95% CI 7.3-1440]) and melanoma (p=0.01; HR 26.3 [95% CI 2.17-319], were significantly associated with worse outcomes.

Conclusions:
Oncologic outcomes after adrenalectomy for metastatic cancer mainly depends on the primary tumor histology.

9. What A Renal Cyst Can Hide

F. Chiancone[1], C. Meccariello[1], M. Fedelini[1], L. Pucci[1], G. Battaglia[1], P. Fedelini[1]
[1] AORN A. Cardarelli, U.O.S.C. Urologia (Napoli)

In the last 4 years 12 patients underwent nephrectomy for spontaneous breaking of renal cysts and discovered a kidney cancer. We show last three clinical cases at our hospital. First patient was 65 years old and was followed for a renal cyst. In December 2014 he reached our emergency department with left lumbar pain and underwent a TC. In the contest of left kidney, TC showed a cyst with non-uniform wall thickening, blood clots, without contrast enhancement (Bosniak II). He underwent nephrectomy and microscopic examination showed a papillary renal cells tumors (type 2) with hemorrhagic necrosis in the contest. Second patient was 31 years old and was followed for a bilateral polycystic kidney disease. In November 2014 he reached our emergency department after an abdominal trauma and underwent a TC. In the contest of a polycystic kidney, TC showed a right cyst with blood clots, without contrast enhancement (hemorrhagic renal cyst. He underwent nephrectomyand microscopic examination showed a cystic renal cell carcinomas. Last patient was 42 years old and in October 2014 reached our emergency department with abdominal pain. He underwent a TC that showed a left renal cyst with non-uniform wall thickening, without contrast enhancement and calcifications (Bosniak II cyst). He underwent nephrectomyand microscopic examination showed hemorrhagic necrosis and a papillary renal cells tumors(type 2) with capsular invasion. Differentiating between complex cystic renal masses that require surgery and those that do not remains a common and difficult diagnostic problem. If these patients had not had an acute event, they would not discover a kidney cancer. Renal tumors and benign complicated cysts can be indistinguishable at imaging and assigning a definitive diagnosis can require an histologic examination. A very short follow-up term or other diagnostic devices as RM or contrast-enhanced ultrasound (CEUS) can help in differential diagnosis.

10. Esistono Fattori Che Possono Influenzare Il Trattamento Endoscopico Della Calcolosi Ureterale?

G. Masiello[1], C. Curatolo[1], V. Verriello[1], T. Turtur[1], G. Balacco[1], M. Altomare[1]
[1] Ospedale Civile di Molfetta, S.C. Urologia (Molfetta)

Introduzione
Lo scopo del presente studio è stato valutare se le dimensioni di un calcolo, la sede ed il suo grado di impatto potessero influenzare l'outcome e le complicanze del trattamento della litiasi ureterale con ureterosc0pio ed energia laser.

Materiali e metodi
Dal gennaio 2009 a febbraio 2014 sono stati trattati 334 pazienti con litiasi ureterale; 120 con litiasi dell'uretere prossimale, 110 dell'uretere medio e 104 dell'uretere terminale. 159 pazienti avevano calcoli con dimensioni superiori al cm mentre 175 presentavano calcoli inferiori al cm. In 84 pazienti vi era riscontro di calcolo impattato. Tutti i pazienti sono stati trattati con ureterolitotrissia laser, utilizzando ureteroscopi semirigidi Storz e Wolf e laser ad Holmio 20 W con fibre da 400 e 600 micron. Tutti i pazienti sono stati rivalutati a 30 giorni, e quindi a sei mesi. E' stata valutata la durata dell'intervento, la necessità di un secondo trattamento, il posizionamento di uno stent, le complicanze intraoperatorie classificate secondo Clavien.

Risultati
Dopo trattamento risultavano liberi da calcoli 100 /104 pz con litiasi uretere terminale, 95 /110 uretere medio, e 75/120 con litiasi uretere prossimale. 54 pz con litiasi superiore al cm e 10 con litiasi inferiore al cm sono stati sottoposti ad un secondo trattamento. 64 pz con calcoli impattati hanno evidenziato una durata della procedura superiore ai 90 minuti, e 38 hanno necessitavano di altri trattamenti. Non sono state registrate complicanze gravi (III e IV sec. Clavien). Si sono registrati 30 casi di perforazioni ureterali intraoperatorie, di cui sono 3 esitate in stenosi ureterali. Sono stati inoltre riportati 5 casi di

sepsi e 4 di infezioni urinarie persistenti.

Conclusioni

L'ureterolitotrissia laser rappresenta il trattamento di prima scelta per la calcolosi ureterale. Queste percentuali però possono lievemente modificarsi in base alla sede, alle dimensioni del calcolo ed in caso di calcoli impattati.

11. Female Paraurethral Leiomyoma: Our 5-Year Experience

R. Migliari[1], A. Buffardi[1], L. Mosso[1], P. Gamba[1]
[1] A.O. Ordine Mauriziano Ospedale "Umberto I", S.C. Urologia (Torino)

Objective

To evaluate the ideal management of female paraurethral leiomyomas, from imaging to surgery and follow-up. We described or experience.

Patients and methods

Between January 2009 and January 2012 we have treated 6 women (age range 32-49 years) affected by paraurethral leiomyoma of different size. All patients were studied with a pelvic MRI and a transvaginal ultrasound-guided biopsy of the paraurethral mass.

Results

All the 6 patients underwent transvaginal excision of the paraurethral mass. They are free of recurrence at follow-up (range follow-up 32 to 72 months). Two patients developed a stress urinary incontinence after the paraurethral mass excision: in both cases the incontinence was successfully corrected by a TVT-O placement. In one patient a fascial sling was necessary to repair an urethral lesion developed during surgical excisione of the mass.

Conclusion

Because of its rarity, a well-defined protocol for the diagnosis and management of a paraurethral mass had not been established. We suggest to perform pelvic MRI as a primary examination followed by biopsy of the lesion. Transvaginal complete surgical resection should be the treatment of choice. As the paraurethral leyomioma does not originates from intraurethral smooth muscle component, the lesion of the urethra is rare.

Transvaginal excision of female urethral leiomyoma is safe. Postoperative urinary incontinence, if any, can be easily corrected with minimally-invasive tecniques.

12. Andrologia Sessuologica O Sessuologia Andrologica? Quale Ruolo Dell'urologo In Un Ambulatorio Integrato.

M. Diambrini[1], W. Giannubilo [1], C. Vecchioli Scaldazza[1], B. Azizi[1], A. Garritano [1], V. Ferrara[1]
[1] Ospedale Carlo Urbani, U.O.C. Urologia (Jesi)

Avere le giuste risposte ad una domanda corretta è il goal dell' ambulatorio integrato di sessuologia – urologia andrologia. Qui si pone l ' attenzione sulle possibili complicanze vasculoneurogene , sulle eventuali terapie mediche e riabilitative , ma anche sulle problematiche emotive e sulla qualità della vita sessuologica. Obiettivo dell ambuatorio è non solo il paziente con patologia andrologico neoplastica, ma anche l 'urologo andrologo che informa e raccoglie e rimanda dati sia tecnico scientifici che emozionali. L 'urologo andrologo esamina accuratamente dati tecnico scientifici, ma spesso ignora la componente emozionale di chi ha di fronte . Ciò comporta anche una perdita dell' efficienza / efficacia del colloquio in quanto il paziente/utente non rivela subito le vere domande sul futuro della sua qualità di vita e le sue vere aspettative dal colloquio nascondendo la parte emotivo emozionale peraltro altrettanto importante quanto i dettagli tecnici relativi alla terapia e agli interventi proposti. Nel biennio 2013-2014 a fronte di 1460 richieste di visite "urologiche", 361 pari al 24,7 % in realtà mostravano problemi sessuologici ad una più attenta analisi della domanda; di questi solo 34 pazienti (2,3 %) hanno direttamente richiesto visita sessuologica. La lettura della vera domanda implica , accanto a quelle organiche, anche minime conoscenze sessuologiche che permettano all' urologo andrologo di gestire in maniera integrata il paziente e più completamente la coppia di cui fa parte . Viene riportata l' esperienza nella valutazione e nel trattamento integrato andro sessuologico in pazienti giunti alla nostra osservazione dall apertura di questo nuovo servizio

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13. Endoscopic Combined Intrarenal Surgery (Ecirs) For The Treatment Of Renal Calculi & Gt; 2 Cm: Our Experience

R. Migliari[1], A. Buffardi[1], D. Surleti[1], H. Ghabin[1]
[1] A.O. Ordine Mauriziano Ospedale "Umberto I", S.C. Urologia (Torino)

Razionale.

Secondo le principali Linee Guida nazionali ed internazionali, la ECIRS (Endoscopic Combined IntraRenal Surgery) rappresenta ormai il trattamento di scelta mini-invasivo per calcoli renali di diametro superiore a 2 cm. Secondo la Nostra esperienza, la ECIRS può essere facilmente eseguita con un utilizzo minimo della fluoroscopia intraoperatoria, con notevole beneficio per il personale di sala operatoria e per il paziente.

Pazienti e tecnica.

Tra Gennaio 2012 e Dicembre 2014, sono stati trattati presso la Nostra Divisione di Urologia 143 pazienti affetti da nefrolitiasi con ECIRS. Le dimensioni medie dei calcoli trattati sono risultate pari a 2.4 cm (range 2.1-3.8 cm). In 34 casi la calcolosi trattata è risultata essere multipla. Tutti i pazienti sono stati sottoposti preoperatoriamente ad indagine UroTC. Previo idoneo posizionamento del paziente sul lettino operatorio (secondo Ibarluzea), la puntura percutanea è sempre stata eseguita sotto guida ecografica; laddove non presente sufficiente dilatazione del bacinetto e dei calici, questa è stata ottenuta mediante irrigazione retrograda tramite ureteroscopio semirigido o flessibile. La litotrissia è stata eseguita con sistema combinato (balistica + ultrasuoni – Swiss Lithoclast Master) e perfezionata in 46 casi con laser ad Olmio per via retrograda.

Risultati.

Il tempo operatorio medio è risultato essere pari a 93 minuti. La fluoroscopia intraoperatoria è stata impiegata per un tempo medio di 34 secondi. Non si sono registrate complicanze intraoperatorie rilevanti. In 4 casi si è assistito a comparsa di sanguinamento nel postoperatorio per fistola arterovenosa, trattata sempe con embolizzazione selettiva; 9 pazienti hanno sviluppato ematoma renale trattato conservativamente. Il tasso di trasfusione postoperatoria è stato pari al 4.2%. La degenza media è stata pari a 4 giorni. Lo stone-free rate è risultato pari all'85.7%.

Conclusioni.

I nostri dati confermano come la ECIRS sia una valida metodica mini-invasiva per il trattamento della nefrolitiasi di grosso calibro e talora complessa.

14. Displasia Cistica Della Rete Testis: Rara Osservazione Per Importante Dubbio Diagnostico. Caso Clinico

M. Diambrini[1], W. Giannubilo [1], C.. Vecchioli Scaldazza[1], B. Azizi[1], A. Garritano[1], V. Ferrara[1], R. Montironi[2]
[1] Ospedale Carlo Urbani, U.O.C. Urologia (Jesi)
[2] Università Politecnica delle Marche, Anatomia Patologica Dip. Scienze Biomediche e Sanità Pubblica (Ancona)

Si riporta un caso clinico caratterizzato da rarità di riscontro, apparentemente facile come prassi decisionale, ma da intepretare a posteriori come dubbio diagnostico non privo di interesse anatomopatologico.
CA nato il 27/11/26 sottoposto a orchiectomia sinistra per neoformazione testicolare . Diagnosi ecografica: Didimo sinistro quasi completamente occupato da area ipoecogena corpuscolata diametro 33 mm con vascolarizzazione ai bordi . Didimo destro con area cribrosa mediale in verosimile corrispondenza dell ilo Regolare pulsatilità dell'arteria spermatica interna bilateralmente : Testicolo sinistro di consistenza dura Descrizione macroscopica: testicolo di mm 45 e funicolo 40 mm. A livello dell ilo del testicolo è presente una formazione cistica pluriconcamerata di diametro 30 mm contenete liquido sieroso limpido . I setti sono sottili . La superfici è liscia, biancastra e rifrangente la luce
Descrizione micro: la formazione cistica pluriconcamerata di aspetto labirintico , mostra setti (o parete delle cisti) fibrotici sottili rivestiti da elementi cellulari appiattiti e privi di atipia nucleare. Nel lume sono talora presenti gruppi di spermatozoi. Occasionalmente il lume delle formazioni cistiche è in continuità con i tubuli seminiferi il cui lume è ampio e povero di spermatozoi. La formazione cistica, posta a livello dell'ilo mediastino del testicolo, è in continuità con l epididimo le cui strutture mostrano un lume dilatato . Il dotto deferente mostra un lume ristretto/stenotico . Indagine immunoistochimica: positività per calretinica e D2-40 e negatività inibina . A fronte dell inequivoca rilevanza dei reperti ecografici e dell esame macro, lo studio microscopico non conferma la gravità dei primi reperti. La trasformazione cistica della rete testis è di osservazione rara, 20 su 1798 reperti autoptici (1 %) e 18 su 518 campioni chirurgici (3%); è di natura benigna e secondaria a processi ostruttivi a livello dell epididimo o del cordone spermatico
Bibliografia : Am J Surg Pathol 20;1231-39, 1996

15. Retroperitoneal Liposarcoma Mimiking Perirenal Abscess: A Case Report

G.. Chiara[1], P. Michele[1], N. Uliano[1], A.M. Pieri[1], S. Destro Pastizzaro[1], D. Martines[1], R. Arnaudi[1], A. Savino[1], A. Prati[1]
[1] Ospedale di Vaio (Fidenza)

A63 years old male patients presented with hyperpyrexia from two weeks, treated by the general practitioner with dual antibiotic combination treatment.Personal history was negative for neoplasm, urinary stone or other significant urologic disease.His physical examination was unremarkable, except for a mild knocking pain at the right flank.Blood tests revealed only a neutrophilic leukocytosis. Chest X-ray was negative. Abdominal Ultrasonography(US)revealed a voluminous perirenal multiloculated mass with thickened wall with a few solid areas. The Computed Tomography(CT) showed a 10x7x6 cm polilobated mass with a prevalent cystic component with intermediate density, at the lower pole, as in a complicated infected cyst or a perirenal abscess. We pose the diagnosis of urosepsis by presumed renal abscess. After several attempts of reclaim with antibiotic therapy and subsequent percutaneous drainage, the patient was submitted to excision of the abscess,preserving the normal renal parenchyma. The examination of the specimen showed a well demarked,excavated necrotic-hemorrhagic lesion, microscopically constituted of reactive logistic cells,resembling a xantogranulomatous inflammatory process,with adjacent well differentiated fatty tissue. In both the components there were scattered atypical stromal elements with atypical hypercromatic nuclei,with occasionally mitotically active, immunoreactive for MDM2 and CD4.Because of the challenging diagnosis the histological slides were rewied by a dedicated patologist, that confirm a dedifferentiated liposarcoma(DDLPS),extended to the excision margins.
DDLPS account approximately 10% of all liposarcoma, the metastatic rate account about 15-20% of the cases irrespective of histologic grade.These lesions often pose greater problems in terms of local control, particular to this difficult anatomic location. Mortality is more often related to uncontrolled local recurrence, and time to relapse to the extension of the surgical resection. Due to the inefficiency of adjuvant therapy, surgery remains the only effective treatment.The gold standard should be to achieve a complete resection with clean surgical margins.
At 6 months follow up the patient has no disease recurrence or metastases.

16. Gallbladder Injury By Percutaneus Nephrostomy Access: A Nosy Rare Case.

D. Autieri[1], L. Topazio[1], S. Khorrami[1], V. Giommoni[1], T. Verdacchi[1], M. De Angelis[1], F. Annino[1]
[1] Ospedale San Donato, U.O.C. Urologia (Arezzo)

Introduction
Gallbladder injury during collecting system access for percutaneous nephrostomy is a rare but potentially life-threatening complication. We report the case of a gallbladder puncture during a percutaneous nephrostomy tube positioning.

Case report
A 39 years old woman with severe hydronephrosis was admitted to our hospital. The patient underwent percutaneous nephrostomy tube positioning. This procedure resulted in easy introduction of the guide wire but unsuccessful placement of nephrostomy drainage. In post-operative day 3 the patient developed a clinical picture of uroperitoneum so, under urgency, she was subjected to ureteral reimplantation (with double J stent) for chronic inflammatory stenosis. In the next post-surgery the patient developed an acute abdomen. This framework could be partly attributed to the trauma on the gallbladder following percutaneous access and in part goes far by uro-peritoneum that has contributed to the development of a cholecystitis ball.
Diagnostic laparoscopy revealed significant intra-abdominal adhesions and bilious ascites throughout the intra-abdominal cavity. A laparoscopic cholecystectomy and intraoperative cholangiography with peritoneal irrigation was performed. The patient recovered without any further complication, and was discharged on postoperative day 20. She underwent removal of double J stent on post-operative day 30.

Conclusions
Gallbladder injury during collecting system access for percutaneous nephrostomy is a rare but potentially life-threatening complication. It should be considered in patients with persistent or worsening right upper quadrant pain after right percutaneous nephrolithotomy, and early recognized because cholecystectomy may be necessary.

17. Un Raro Caso Di Poliorchidismo

L. Pucci[1], F. Chiancone[1], G. Battaglia[1], F. Monaco[1], D. Mattace Raso[1], P. Fedelini[1], M. Carrino[1]
[1] A.O.R.N. A. Cardarelli (Napoli)

Il poliorchidismo è una rara anomalia caratterizzata dalla presenza di più di due testicoli. Presentiamo qui un caso di triorchidismo. Nel Gennaio 2015 un paziente di 52 anni si recava al nostro dipartimento per una colica renale. Durante l'esame obiettivo uro-genitale egli presentava un caratteristico triorchidismo. All'anamnesi il paziente riferiva di avere ignorato da sempre la sua condizione, di avere tre figli, una lieve ipertensione arteriosa e diabete mellito. Il paziente era asintomatico ed il triorchidismo non era associato ad ernia inguinale o altre patologie andrologiche (idrocele, ipospadia). Il testosterone ematico era 550 ng/dl. Il cariotipo effettuato su sangue periferico mostrava un corredo cromosomico normale (46 XY). Abbiamo sottoposto il paziente ad ecografia doppler scrotale. Nel 65% dei casi il testicolo soprannumerario è situato nell'emiscroto sinistro1. Nel nostro caso il testicolo soprannumerario era situato nell'emiscroto destro, aveva ecostruttura e vascolarizzazione nella norma e si trattava di un

poliorchidismo di tipo A2 per cui testicolo ed epididimo sono doppi, ma vengono drenati dallo stesso dotto deferente.
In letteratura è descritto un aumentato rischio di malignità testicolare2 (6,4%) in presenza di poliorchidismo indipendentemente dalla posizione del testicolo soprannumerario. Le neoplasie più comunemente riscontrate sono carcinomi embrionali, tumori a cellule germinali e i seminomi. Considerata l'età del paziente e la scarsa "compliance" dello stesso abbiamo proposto l'orchiectomia preventiva.

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18. Preservazione Della Fertilità Nel Klinefelter Adolescente: Descrizione Di Caso Clinico

E. Pescatori[1], C. Tabanelli[1], A.P.. Ferraretti[1], S. Bernasconi[2]
[1] SISMER (Bologna)
[2] Università di Parma, Dipartimento dell'età evolutiva (Parma)

I principali correlati andrologici della forma classica o "non mosaico" della S. di Klinefelter (SK), cariotipo 47XXY, sono la conseguenza della progressiva degenerazione sclerofibrotica gonadica: ipotestosteronemia ed infertilità. L'evolutività della degenerazione testicolare spiega come nei testicoli dei soggetti SK possono esistere alcuni focolai di spermatogenesi normale in età puberale, che tendono a regredire in età adulta. La ricerca microchirurgica (Micro-TESE) precoce di spermatozoi da testicolo, in vista di crioconservazione per futura ICSI, permette un recupero positivo nel 55% dei casi (Fullerton e coll, Human Reproduction, 2010). Presentiamo un caso di soggetto con diagnosi prenatale di SK, forma classica. Il primo colloquio con genitori è avvenuto a 16 aa di età del ragazzo, su invio di Collega Endocrinologo Pediatra. Ai genitori è stata illustrata la possibilità di ricerca precoce di spermatozoi da testicolo. Ragazzo e genitori si sono motivati al tentativo di recupero a 19 aa di età del ragazzo, che già presentava ipotestosteronemia. La terapia sostitutiva con testosterone esogeno veniva deferita a dopo il tentativo di recupero, per non deprimere ulteriormente la spermatogenesi. La testosteronemia totale preoperatoria era di 2.03 ng/ml. L'intervento è stato condotto secondo tecnica classica di Micro-TESE su testicoli di volume ecografico 3 ml a sinistra e 4 ml a destra. In entrambi i testicoli sono stati rinvenuti spermatozoi (0,00002 x 106, bilateralmente). Si è quindi avviata crioconservazione. L'esame istologico ha descritto tubuli seminiferi con sclero-jalinosi, ridotti elementi della linea germinale con arresto maturativo parziale (spermatociti), rarissime forme mature. Il decorso postoperatorio è stato regolare e si è intrapresa terapia sostitutiva con testosterone esogeno, con conseguente normalizzazione della testosteronemia. Il presente caso enfatizza la necessità di interazione tra le aree specialistiche Pediatria e Andrologia, allo scopo di offrire la miglior possibilità di recupero di spermatozoi ai soggetti affetti da S. di Klinefelter.

19. Singola Metastasi Ureterale Di Neoplasia Mammaria 15 Anni Dopo Il Trattamento

A. Meneghini[1], D. Reale[2], A. Haile Selassie[1], A. Crestani[1]
[1] ULSS 19 Adria, U.O.C. Urologia (Adria)
[2] ULSS 19 Adria, U.O.C. Anatomia Patologica (Adria)

Riportiamo il caso di una donna di 85 anni sottoposta all'età di 70 anni a quadrantectomia mammaria destra e linfoadenectomia locoregionale per neoplasia (stadio patologico pT2N1, recettori per gli estrogeni positivi). La paziente è stata successivamente trattata con radioterapia e chemioterapia adiuvanti. Il follow up si è mantenuto negativo sino al novembre 2014. La paziente è giunta alla nostra osservazione per la comparsa di algie lombari destre sostenute da un quadro di idroureteronefrosi omolaterale ed il riscontro TC di una stenosi ureterale. La paziente è stata quindi sottoposta ad ureterorenoscopia destra che ha documentato la presenza di una stenosi della lunghezza di circa 3 centimetri sostenuta dalla presenza di tessuto neoformato a livello dell'uretere iliaco. L'esame istologico eseguito sul campione bioptico ha documentato la presenza di metastasi compatibile con la neoplasia mammaria precedentemente trattata. Le indagini di stadiazione (TC cerebrale e toracica, scintigrafia ossea) non hanno evidenziato altre sedi di localizzazione di malattia. La paziente ha intrapreso un trattamento con lestrozolo.
È interessante osservare come l'intervallo di tempo tra la neoplasia iniziale e l'eventuale presentazione metastatica della malattia possa essere superiore a 5-10 anni. La neoplasia mammaria ha un potenziale metastatico a qualunque apparato. Tuttavia il coinvolgimento dell'apparato urinario è raro e le localizzazioni ureterali metacrone sono di eccezionale rarità.

appunti