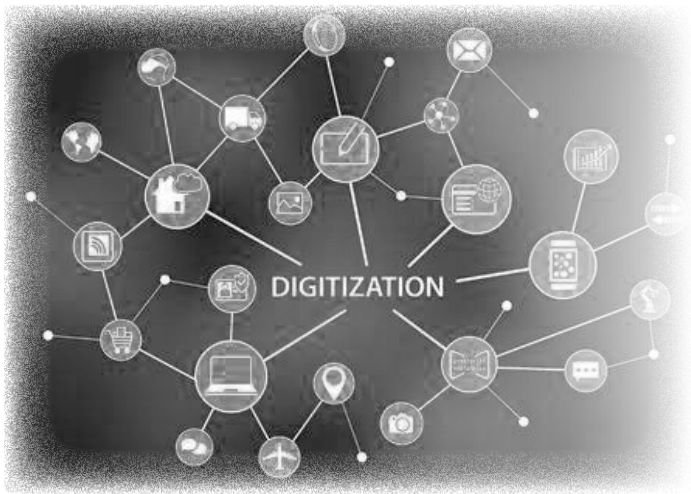


# XXVII Congresso Nazionale in formato digitale su piattaforma WEB

# Associazione Urologi Italiani - AURO.it



# abstracts

# libro degli Abstracts e degli Autori

# Istruzioni

## per la consultazione degli abstracts

A pagina **3 l'Indice:**

L'indice delle **sessioni** cui afferiscono gli abstract  
L'elenco degli **Autori** e delle loro corrispondenti  
sessioni

Le **sessioni** di Abstracts sono identificate con colori  
in base al **tipo di presentazione:**

**Blu i video**

**Rosso le comunicazioni**

Gli **abstracts** sono esposti consecutivamente nelle rispettive sessioni di presentazione, come da programma. Pertanto a seconda delle sessioni (comunicazioni o video) potete identificare l'abstract desiderato.

Nell' **indice degli Autori** potete trovare l'elenco degli Abstract che ciascuno ha presentato con le indicazioni delle pagine dove sono pubblicati.

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# Video 1 - Ricostruire dentro la Vescica

## 1. #164: TOTALLY INTRACORPOREAL ROBOT-ASSISTED ILEAL URETERIC REPLACEMENT FOLLOWING AN URETERAL INTUSSUSCEPTION

Riccardo Mastroianni<sup>1</sup>, Gabriele Tuderti<sup>1</sup>, Umberto Anceschi<sup>1</sup>, Mariaconsiglia Ferriero<sup>1</sup>, Aldo Brasseti<sup>1</sup>, Salvatore Guaglianone<sup>1</sup>, Michele Gallucci<sup>2</sup>, Giuseppe Simone<sup>1</sup>

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We report the case of a 50 yr-old man admitted from Emergency Room for a right ureteral intussusception, occurred using a Dormia basket during an operative ureteroscopy. An antegrade pyelography demonstrates a proximal ureteral injury, about 4 cm caudal to the right renal pelvis, and a 17cm ureteral defect. Therefore, patient underwent a totally intracorporeal robot-assisted ileal ureteric replacement. The first step was the medialization of the right colon and the isolation of the ureter. In the video, is clearly evident the proximal damaged ureter, of which only the serosa is visible. The proximal ureter was transected and spatulated. Then, the segment of ileum nearest the proximal ureter was isolated, at least 20 cm distant from the ileocecal valve and transected using Endo-GIA. The proximal uretero-ileal anastomoses was performed using two running sutures of 4-0 monocryl, each in a semicircular configuration. The robot was redocked in Trendelenburg position. The right robotic port and the left laparoscopic port are closed and three additional ports are placed. A side to side ileal anastomosis was performed with motorized staplers. Afterwards, the bladder dome was opened, and the intussuscepted ureter, identified into the bladder lumen, transected and excised. Ileovesical anastomosis was completed with two 4-0 monocryl running sutures, each in a semicircular configuration.

## 2. #173: NERVE-SPARING ROBOT-ASSISTED RADICAL CYSTECTOMY WITH INTRACORPOREAL NEOBLADDER IN MALE PATIENTS: SURGICAL TECHNIQUE, PERIOPERATIVE, ONCOLOGIC AND FUNCTIONAL OUTCOMES

Gabriele Tuderti<sup>1</sup>, Riccardo Mastroianni<sup>1</sup>, Umberto Anceschi<sup>1</sup>, Simone D'Annunzio<sup>2</sup>, Mariaconsiglia Ferriero<sup>1</sup>, Alfredo Bove<sup>1</sup>, Aldo Brasseti<sup>1</sup>, Salvatore Guaglianone<sup>1</sup>, Michele Gallucci<sup>3</sup>, Giuseppe Simone<sup>1</sup>

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Prospectively maintained IRB approved bladder cancer database was queried for "male", "RARC", "iN" and "Nerve-sparing". Inclusion criteria were: organ confined disease, without involvement of prostate, prostatic urethra or bladder neck, and strong motivation to preserve sexual function. Key surgical steps are: isolation of the ureters; preparation of Douglas space and athermal isolation of seminal vesicles; development of posterior intrafascial dissection plane, endopelvic fascia incision and antegrade intrafascial dissection of neurovascular bundles up to prostatic apex; assessment of distal ureter vascularity before and after LND with near-infrared fluorescence imaging. Hypogastric and presacral nodes were not involved in the dissection, in order to avoid any injury to the pelvic plexus. Finally, intracorporeal Padua ileal neobladder was performed. Baseline demographic, clinical, perioperative, oncologic and functional data were collected and reported. Kaplan-Meier method was performed to assess survival outcomes and day & night-time continence recovery probabilities.

## 3. #158: NEOVESCICA ILEALE ORTOTOPICA CON APPROCCIO ROBOT-ASSISTITO: QUALE SCEGLIERE?

Alessandro Izzo<sup>1</sup>, Giovanni Grimaldi<sup>1</sup>, Giuseppe Quarto<sup>1</sup>, Raffaele Muscariello<sup>1</sup>, Luigi Castaldo<sup>1</sup>, Dario Franzese<sup>1</sup>, Maritna Perra<sup>1</sup>, Sisto Perdonà<sup>1</sup>

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Il video descrive le tre tecniche utilizzate presso il nostro Istituto per il confezionamento della neovescica ileale ortotopica intracorporea con approccio robot-assistito: la VIP (Vescica Ileale Padovana), la "Y shaped" e la FloRIN. Nel dettaglio da gennaio 2017 ad Aprile 2019 sono stati trattati 37 pazienti (28 M e 9 F): 28 VIP 6 "Y" shaped 3 FloRIN I dati relativi ai tempi operatori, perdite ematiche, degenza e tempi di cateterizzazione sono riportati nel video. Nei pazienti sottoposti a VIP si sono registrati due casi di infezione complicata delle vie urinarie, un caso di osteomielite pubica, un caso di fistola urinaria esitata in stenosi dell'anastomosi neo-vescico-ureterale. Non ci sono state complicanze, ad oggi, nei pazienti trattati con le altre due derivazioni intracorporee. Ulteriori dati patologici e funzionali vengono riportati nelle tabelle del video. Sulla base della nostra esperienza

preliminare possiamo concludere che la neovescica più anatomica è la VIP. Nei casi in cui gli ureteri siano corti o il meso non complicante, la "Y" shaped, grazie alla sua versatilità e facilità di esecuzione è la più indicata. La giusta via di mezzo potrebbe essere la FloRIN. La nostra esperienza supporta la fattibilità delle 3 tecniche descritte nel video e dimostra la loro somiglianza e sicurezza in termini con risultati.

#### 4. #217: CISTECTOMIA RADICALE VIDEOLAPAROSCOPICA PROSTATE-SEMINAL SPARING CON ILEOCAPSULOANASTOMOSI

Giuseppe Ruoppo<sup>1</sup>, Franco Bergamaschi<sup>1</sup>, Matteo Spagni<sup>1</sup>, Ripoli Andrea<sup>1</sup>, Autieri Domenico<sup>1</sup>, Sebastiano Spatafora<sup>1</sup>

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La cistectomia radicale laparoscopica prostate – seminal sparing è proponibile solo a pazienti accuratamente selezionati e candidabili al confezionamento di neovescica ortotopica. Nel video proponiamo il caso di un cinquantenne, ex sportivo agonista, con diagnosi di neoplasia vescicale infiltrante (t2) alto grado, della parete vescicale posteriore, prima manifestazione, singola. Ipss 3 psa 1.5, Q max 23 prostata 25 cc, non sospetta. Motivato nella preservazione della funzione sessuale. Il video pone in risalto come l'approccio laparoscopico nella fase demolitiva differisce dallo standard sia in fase di dissezione posteriore che anteriore. Più articolata la prima per la necessità sviluppare un piano di clivaggio tra vescicole seminali lasciate in sede e la parete vescicale posteriore retro-sovrà trigonale. Ciò consente la preservazione sia dei bundle vascolo nervosi che della rete del plesso pelvico presente a tale livello. La dissezione anteriore e la preparazione del collo vescicale e della base prostatica devono consentire la delimitazione della capsula e dell' uretra prostatica sovra collicolare. Non eseguita turp preliminare per le esigue dimensioni prostatiche in paziente giovane senza sintomi di rilievo. La neovescica confezionata con stapler intracorporea è una comey ii. Anastomosi ureterali dirette non antireflusso. A distanza di 3 anni il paziente è potente con eiaculazione, continente. Non evidenza di recidive pelviche e a distanza.

#### 5. #219: CONFEZIONAMENTO DI NEOVESCICA ILEALE ORTOTOPICA SEC HAUTMAN MODIFICATA APPROCCIO TOTALMENTE LAPAROSCOPICO CON RICOSTRUZIONE MANUALE ( V- LOCK SUTURE)

Giuseppe Ruoppo<sup>1</sup>, Franco Bergamaschi<sup>1</sup>, Domenico Viola<sup>1</sup>, Filippo Borgatti<sup>1</sup>, Daniela Biferi<sup>1</sup>, Giulia Bonfante<sup>1</sup>

<sup>1</sup> Arcispedale S. Maria Nuova (Reggio Emilia)

Il video mostra la tecnica di confezionamento di neovescica ileale con approccio laparoscopico totalmente intracorporeo a due operatori. Terminata la fase demolitiva e la linfectomia, isolato un tratto di ileo di circa 60 cm si procede prima ad anastomosi uretro-ileale su foley 20 ch siliconato con due emicontinue di pds 3/0. A seguire, avendo un punto fisso uretrale, si realizza la detubularizzazione ileale al versante antimesenterico e successivamente la riconfigurazione mediante suture del tipo v-lock convidien 3/0. Si riconfigura prima la parete posteriore (3 suture), poi a neovescica ancora "aperta" si procede alle anastomosi uretero ileali. A tal proposito la tipologia di neovesica la definiamo di hautman modificata per la presenza di due camini non detubularizzati ai due capi della w-shape al fine di rendere più agevoli le anastomosi uretero ileali dirette. Completate le anastomosi ureterali si procede alla chiusura del serbatoio ileale ortotopico nella parete anteriore e a livello della "cupola" da cui fuoriescono i tutori ureterali eseteriorizzati dalla parete addominale attraverso un porta da 5 mm. La metodica seppur indaginosa e richidente un livello avanzato sulla curva di apprendimento può essere una alternativa minivasiva allo standard open in pazienti selezionati.

#### 6. #316: DOES LAPAROSCOPIC SURGERY STILL PLAY A ROLE IN UROLOGY?

Willy Giannubilo<sup>1</sup>, Giuseppe Sortino<sup>1</sup>, Maurizio Diambrini<sup>1</sup>, Manuel Di Biase<sup>1</sup>, Andrea Marconi<sup>1</sup>, Vincenzo Ferrara<sup>1</sup>

<sup>1</sup> "Carlo Urbani" Hospital (Jesi)

In this video we show some complex urological procedures treated with laparoscopic approach: radical prostatectomy in patients already undergoing major abdominal surgery, ureteral replantation, removal of large retroperitoneal masses, complex partial nephrectomies. Our goal is to demonstrate the effectiveness and safety of this method in the age of robotic surgery.

#### 7. #268: EN BLOC TRANSURETHRAL RESECTION OF THE BLADDER

Roberto Giulianelli<sup>1</sup>, Riccardo Lombardo<sup>1</sup>

<sup>1</sup> Nuova Villa Claudia (Roma)

We present technical aspects of en-bloc transurethral resection of the bladder all in different zones of the bladder.

# Comunicazioni 1 - LUTS e IPB

## 1. #303: DETRUSOR UNDERACTIVITY: ARE DIFFERENT DIAGNOSTIC CRITERIA OFTEN RELIABLE IN CLINICAL PRACTICE?

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### Objective

Detrusor underactivity (DU) is a common clinical problem in patient being referred with lower urinary tract symptoms (LUTS). DU is defined as a contraction of reduced strength and/or duration, resulting in prolonged bladder emptying and/or failure to achieve complete bladder emptying within a normal time span (ICS in 2003). However, the majority of published criteria concentrate on detrusor strength with the combinations of maximal flow rate (Qmax) and maximal detrusor pressure at Qmax (Pdet/Qmax) resulting incomplete consequence with regard to definition perspective. Finally, many other tools have been proposed with the aim of characterizing DU, but specific recommendations have been made on this regarding. The aim of our study is to evaluate the diagnostic performance of different DU definitions in a large cohort of patients undergoing urodynamic study.

### Materials and Methods

We prospectively collected data of patients receiving urodynamic examination from February 2010 to September 2018 according to EAU guidelines. Urodynamic exam has been performed on the basis of ICS recommendations. DU has been considered as the presence of a defined as detrusorial pressure (Pdet)/Qmax < 30 cmH2O and it has been considered as the reference variable. We also calculated different variables including: bladder contractility index (BCI), watt factor (WF) and bladder voiding efficiency (BVE). The following cut-offs have been considered as suggestive for DU according to previous literature data: BCI < 100, BVE < 100, WF80 < 10

### Results

In total, 792 patients have been included, 65.1% male and 34.9% female. The median age was 63.0 yrs (interquartile range: 47.0-71.0). 232 pts (29.29%) had a Pdet/Qmax < 30 cmH2O, 590 (74.49%) had a BVE < 100, 370 (46.72%) had a BCI < 100 while 540 (68.2%) had a WF80 < 10. The agreements using the kappa Cohen's coefficients between PdetQmax and the other parameters were as following: with BCI was 77.53% ( $p \leq 0.01$ ), with BVE was 36.87% ( $p = 0.98$ ) and with WF80 was 48.66% ( $p \leq 0.01$ ). At the univariate logistic regression analysis, BCI < 100 (odds ratio [OR]: 26.96;  $p \leq 0.01$ ), BVE < 100 (OR: 1.44;  $p = 0.03$ ) and WF80 < 10 (OR: 5.35;  $p \leq 0.01$ ) were associated with PdetQmax < 30 cmH2O. We performed a bivariate logistic regression combining BCI < 100 with the other parameters and we showed that BCI (OR 0.94;  $p \leq 0.01$ ) and W80 (OR: 0.89;  $p = 0.02$ ) were both associated with DU. Finally, the decision curve analysis showed clinical benefit of BCI in predicting DU, with slightly increase in net benefit of BCI+WF80 over BCI.

### Discussions

Finally, the decision curve analysis showed clinical benefit of BCI in predicting DU, with slightly increase in net benefit of BCI+WF80 over BCI. We found that BCI and WF80 exhibited agreement with PdetQmax for assessing DU and that combining both variables add clinical benefit in predicting DU.

### Conclusion

We found that BCI and WF80 exhibited agreement with PdetQmax for assessing DU and that combining both variables add clinical benefit in predicting DU. We suggest in improving definition of DU by investigating the clinical benefits of other variables for assessing DU.

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## 2. #216: UROLOGICAL-GERIATRIC INTEGRATED DIAGNOSTIC-THERAPEUTIC PATHWAY (PDTA) AT GALLIERA HOSPITAL IN GENOA

Fabio Bonini<sup>1</sup>, Antonia Di Domenico<sup>1</sup>, Lisa Cammalleri<sup>2</sup>, Martina Beverini<sup>3</sup>, Giacomo Capponi<sup>1</sup>, Marco Ennas<sup>1</sup>, Fabio Campodonico<sup>1</sup>, Claudia Brusasco<sup>4</sup>, Alberto Pilotto<sup>2</sup>, Carlo Intorini<sup>1</sup>

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### Objective

Aim of our study is to identify patients at moderate/severe geriatric risk in order to create an appropriate clinical pathway, using the following tools:

- 1) Definition of a clinical and functional prognosis, before and after urological surgery using the Multidimensional Prognostic Index (MPI);
- 2) Modification of existing clinical risk conditions before and after surgery;
- 3) Early initiation of an appropriate social-assistential path for elderly patients undergoing urological surgery

### Materials and Methods

At the Galliera Hospital in Genoa we have developed a Urological-Geriatric Integrated Diagnostic-Therapeutic Pathway (PDTA) for patients aged  $\geq 65$  years affected by urogenital pathologies requiring major laparoscopic or open surgery: radical cystectomy, radical or partial nephrectomy, radical prostatectomy. These patients, in a presurgical outpatient context, receive a Selfy\_MPI, which is a validated self-assessment questionnaire of multi-dimensional risk for negative outcomes validated for  $\geq 65$  years patients.<sup>1</sup> In case of Selfy\_MPI class 2 (moderate risk) or 3 (high risk) the patient is addressed to the urogeriatric team, which consists of various professional figures who cooperate together (urologist, geriatrician, anesthesiologist, nurse, social worker). In particular, the geriatrician evaluate the patient for clinical history, functional assessment and calculation of MPI. Compared to other frailty measurements, MPI shows an higher positive predictive value of adverse outcomes in hospitalized older patients.<sup>2</sup> When the MPI score identifies a patient in a class risk 2 or 3 a specific assessment of the risk areas is required, in order to improve clinical and functional parameters, follow patient after surgery during hospitalization, plan specific postoperative geriatric and urologic follow-up after 3 or 6 months.

### Results

The PDTA started on February 2019 and until October 2019 it has included 54 patients aged from 66 to 92 years old. All patients performed the Selfy\_MPI. 46 patients showed a Selfy\_MPI at a risk class 1; 8 patients resulted into the risk class 2, so they were evaluated by geriatricians that performed full MPI, confirming the risk class (MPI 2). 2 patients had an ASA score 4 and the anesthesiologist excluded surgery, 1 patient developed metastasis and began chemotherapy; 2 patients refused surgery and 3 patients were considered able to be operated. 49 patients underwent open or laparoscopic surgery: 17 patients were submitted to radical prostatectomy (15 laparoscopic, 2 open surgery), 12 to radical cystectomy (2 laparoscopic, 10 open), 15 to radical nephrectomy or nephroureterectomy (7 laparoscopic, 8 open), 3 to laparoscopic partial nephrectomy, 1 to synchronous bilateral laparoscopic radical partial nephrectomy for synchronous renal cancer, 1 to open radical cystectomy with concomitant nephroureterectomy.

### Discussions

Several studies reported the effects of frailty on falls, hospitalization and mortality, but only few focused on surgical patients and frailty is not included in the traditional surgical risk scales.<sup>3</sup> The most common definition of frailty is an age-associated, biological syndrome characterized by decreased biological reserve, due to dysregulation of several physiological systems, and poor outcomes.<sup>4</sup> Frail patients have an higher risk of adverse outcomes including prolonged hospitalization, mortality and disability.<sup>4,5</sup> The prevalence of frailty increases with age: in people older than 65 years ranging from 7 to 16.3%, reaching 30% of people aged 85 years.<sup>6,7</sup> Literature shows an improvement of clinical outcomes of elderly people undergoing surgery when they undergo an evaluation of frailty with multidimensional assessment.<sup>8</sup> In our PDTA we used the MPI score for patients at risk of negative outcomes. MPI is a widely accepted prognostic tool, based on a standard Comprehensive Geriatric Assessment (CGA): multicenter studies demonstrated that MPI was a significantly more accurate predictor of all-cause mortality than other frailty index.<sup>9</sup> The European Medicines Agency (EMA), in 2018 reported that the MPI is able to extract information from CGA to categorized frailty in three subgroups with excellent prognostic value.

### Conclusion

The objective of our PDTA is to create for elderly patients an individual treatment plan based on frailty degree. The creation of PDTA provides a better customization of the clinical /diagnostic pathway and prognostic classification of the patients. The results we have obtained so far are still preliminary, however, the possibility of extend the PDTA to patients requiring endoscopic surgery will be evaluated.

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### 3. #220: SAFETY PROFILE OF TREATMENT WITH GREENLIGHT VERSUS THULIUM LASER FOR BENIGN PROSTATIC HYPERPLASIA

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#### Objective

Surgical treatment of benign prostatic hyperplasia (BPH) might take advantage of laser technologies. Different types of laser are utilized for this disease. Their major strengths are reduced morbidity compared to endoscopic resection with lower complication rate, bleeding, hospital and catheterization time. No studies analyzed the different risk of intra/peri-operative events between patients undergoing Thulium vs. GreenLight procedure.

#### Materials and Methods

We retrospectively reviewed 100 consecutive cases undergoing GreenLight standard or anatomical vaporization performed by an expert laser surgeon and Thulium vapoenucleation performed during the learning curve of an expert endoscopic surgeon. Pre-operative data (age, ASA score, prostate volume, use of antiplatelet and anticoagulant medications, urinary retention), intra and post-operative events at 90 days were analyzed (conversion to TURP, hospital and catheterization time, complications, access to hospital for consultation/readmission, incontinence, erectile dysfunction). The independent sample t-test & chi-square tests were used for statistical analysis. A  $p \leq 0.05$  was considered statistically significant.

#### Results

All data are reported in Table 1. No major differences were observed between the two groups in terms of pre-operative data, no statistical differences were found in terms of hospital stay, catheterization time, capsular perforation, erectile dysfunction, post-operative storage symptoms, urinary retention and de novo urgency. Blood transfusion ( $p \leq 0.0038$ ), intra-operative use of resectoscope for hemostasis ( $p \leq 0.0086$ ), and transient stress urinary incontinence (IUS) in the Thulium group were statistically significant. On the contrary the presence of indwelling catheter ( $p \leq 0.0029$ ) and lack of conversion to TURP ( $p \leq 0.023$ ) were in favor of Thulium patients. 25% of post-operative readmissions were necessary in the GreenLight group vs. 16% in the Thulium group. The overall complication rate in GreenLight and Thulium groups were 29% versus 37% respectively, with 9% Clavien 3b in the Thulium patients versus 1% in GreenLight.

#### Conclusion

Despite the bias present in this study (different expertise, difference between the vapoenucleation and the pure enucleation technique), GreenLight and Thulium laser treatments for BPH show similar safety profiles. The higher rate of transient IUS in Thulium patients might be explained by the use of enucleation technique in contrast to vaporization or vapoenucleation technique with GreenLight. Furthermore, the higher use of resectoscope for hemostasis during Thulium enucleation may also be linked to the need to perform a safety morcellation procedure. Larger study population reflecting multicenter experience would be necessary to better clarify the rate of major complications in Thulium group, the real incidence of post-operative erectile dysfunction and the grade and durability of post-operative storage symptoms in these patients' populations.

#### 4. #143: EFFECTS OF PROTOVES- M1® ON THE PREVENTION AND THE TREATMENT OF IRRITATIVE SYMPTOMS AFTER GREENLIGHT LASER PHOTOSELECTIVE VAPORIZATION (PVP) OF BENIGN PROSTATIC HYPERPLASIA (BPH)

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##### Objective

The aim of this study was to analyse the role of two alkaloid, Protopine and Nuciferine (Protoves-M1®) in the prevention and the treatment of irritative symptoms (urgency and dysuria) after GreenLight laser photoselective vaporization (PVP) of benign prostatic hyperplasia (BPH)1.

##### Materials and Methods

Between July 2017 to September 2019, 120 patients with benign prostatic hyperplasia whose underwent GreenLight laser photoselective vaporization were prospectively randomized into two groups (Group A=Protoves M1® syrup, 10 ml, once a day, for 6 weeks; Group B= placebo (flavoured coloured water), 10 ml, once a day, for 6 weeks). They started therapy two weeks before the surgery. The primary endpoint was the evaluation of the efficacy of the therapy with Protoves M1® in controlling of the irritative symptoms. The patients were evaluated at baseline (the day after removal of vesical catheter) and after 4 weeks (six weeks of therapy). All patients underwent IPSS (International Prostatic Symptoms Score) questionnaire, OverActive Bladder questionnaire-short form (OABq-SF) 6 and 13 and patient perception of intensity of urgency scale (PPIUS). Improvement was evaluated with the Patient Global Impression of Improvement questionnaire (PGI-I), that is a global index that may be used to rate the response of a condition to a therapy. PGI-I was evaluated at 4 weeks follow-up.

##### Results

The two groups showed no differences in terms of patients' demographics as well as baseline characteristics in all variables analysed ( $p > 0.05$ ). No significant differences were seen in the baseline results of questionnaires in the two groups ( $p > 0.05$ ). The patients of Group A showed a better IPSS score ( $p \leq 0.001$ ), a better control of urgency symptoms (PPIUS) ( $p = 0.020$ ) and a better OAB1-SF 6 ( $p = 0.001$ ) and 13 ( $p = 0.001$ ) than Group B at 4 weeks follow-up (Table 1). PGI-I demonstrated a better satisfaction of the treatment in the group A than in the Group B ( $p \leq 0.001$ ).

##### Discussions

The Greenlight laser is a continuous wave laser which initially used a potassium titanyl phosphate (KTP) crystal to produce a light beam at a wavelength of 532 nm. This wavelength is selectively absorbed by oxyhemoglobin in prostatic tissue at a power level of 80 W, allowing for tissue photovaporization with a short depth of penetration. Despite this, irritative symptoms including prolonged urgency and dysuria after GreenLight laser photoselective vaporization (PVP) of benign prostatic hyperplasia (BPH) are common complication. In our experience, these symptoms self improved after some months. The use of Protoves-M1 before and after surgery improved the control of these irritative symptoms as demonstrated by the questionnaires administrated to our patients. Protopine has a confirmed anticholinergic-antimuscarinic<sup>2</sup> and GABAergic<sup>3</sup> action and it can impact some neurological systems responsible of bladder functions. Nuciferine is a partial antagonist of D2-like receptor and has a well established regulatory action on the dopaminergic system (responsible of urination onset<sup>4</sup>). Moreover Nuciferine has a role in reducing states of tension and anxiety on a psychological level<sup>5</sup>. In addition, Nuciferine reduce inflammation by inhibiting TLR4/PI3K/NF- $\kappa$ B signaling.

##### Conclusion

Protoves M1® can be an interesting alternative to antinflammatory agents to treat irritative symptoms of GreenLight laser photoselective vaporization of benign prostatic hyperplasia.

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## 5. #178: RETROSPECTIVE COMPARISON OF PERIOPERATIVE AND 1-YR SELF-REPORTED FUNCTIONAL OUTCOMES BETWEEN MILLIN, FREYER AND MADIGAN ROBOT ASSISTED SIMPLE PROSTATECTOMY: SINGLE CENTER SERIES

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### Objective

Robot assisted simple prostatectomy (RASP) is an established surgical procedure for the management of obstructive symptoms caused by large adenomas. Traditionally this is performed according to the Freyer (trans-vescically) or Millin (trans-capsular) technique. These are known to cause retrograde ejaculation which limits their application in younger patients. We have recently described a novel urethra sparing (Madigan) technique which has shown some promising preliminary results. In this study we compare the above techniques for perioperative and intermediate term functional outcomes.

### Materials and Methods

We retrospectively collected data from patients who underwent RASP across the three techniques in our center. Baseline demographic, clinical and perioperative data were collected. Standardized indications to the available three techniques were: bladder diverticula or stones and/or large median lobe for Freyer technique, patients' desire to preserve antegrade ejaculation in absence of any of the above mentioned criteria for Freyer procedure, Millin procedure in all other cases. Baseline and one-yr functional outcomes assessed by means of self-reported validated questionnaires (IPSS, IIEF, ICIQ short form, MSHQ Short Form) were analyzed. Categorical and continuous variables were compared with chi square and Student t test, respectively.

### Results

Between June 2012 and September 2019, 45 patients underwent RASP: 23 (51%) Millin, 8 (18%) TVA, and 14 (31%) Madigan. The median follow-up was 37 months (18–63.5). Demographic and clinical data were homogeneous for BMI, prostate volume and ASA score ( $p=0.34$ ,  $0.23$ ,  $0.57$  respectively), while patients who underwent Madigan were younger (median 66) compared to the Millin (72) and Freyer (74) cohorts ( $p=0.013$ ). Baseline IPSS, IIEF, ICIQ, or MSHQ scores were comparable between groups (all  $> 0.17$ ). Similarly, operative time, hospital stay and complication rates were comparable between groups ( $p=0.28$ ,  $0.27$  and  $0.32$ , respectively). The Madigan procedure provided higher 1-yr MSHQ score (median 10.5), mostly based on preserved antegrade ejaculation, compared with Millin (median 2) and Freyer (median 2) cohorts ( $p=0.04$ ) and also a trend towards significantly higher IIEF score ( $p=0.05$ ).

### Conclusion

Our study has demonstrated how the Madigan technique is a promising surgical approach to preserve the ejaculatory function while ensuring resolution of obstructive symptoms comparable to the traditional techniques, regardless of the prostate size.

## 6. #276: USE OF A COMPLEXED NUTRACEUTICAL PRODUCT BASED ON FLOWER POLLEN EXTRACT, VITAMIN B1, VITAMIN B2, VITAMIN B6, VITAMIN B12, VITAMIN PP AND FOLIC ACID TO LOWER PROSTATE- SPECIFIC ANTIGEN (PSA) LEVELS IN PATIENTS WITH ASYMPTOMATIC BENIGN PROSTATE HYPERPLASIA (BPH)

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### Objective

"Modern" nutraceutical products are frequently used in uro-andrology [1,2]. Medicinal plants are excellent devices for the treatment of symptoms due to benign prostate hyperplasia (BPH) and other urological disorders (e.g., chronic pelvic pain syndrome and chronic prostatitis) [3] thanks to their antioxidant, anti-proliferative and anti-inflammatory effects [4,5]. The aim of our study is to determine efficacy of complexed nutraceutical product based on flower pollen extract, vitamin B1, vitamin B2, vitamin B6, vitamin B12, vitamin PP and folic acid to lower of prostate-specific antigen (PSA) with values between 4 and 10 ng/ml (so-called "gray zone") in patients with asymptomatic BPH.

### Materials and Methods

26 men aged 60.53 (SD=4.24), mean PSA 7.35 ng/ml (SD=2.91), affected by asymptomatic BPH were treated with a nutraceutical product containing flower pollen extract and a multivitamin complex for three months. The therapeutic protocol provided for the administration of 2 tablets a day (together) to take 30 minutes before the main meal. Inclusion criteria were defined as follows:

- total PSA in a range of 4.0-10.0 ng/ml;
- prostate volume  $\leq 50$  ml (by suprapubic ultrasound);
- digital rectal examination (DRE) negative for suspicious nodularity of gland;
- past medical history negative for previous pelvic surgery;

- no therapies in course with other phytotherapeutic agents, alpha-blockers, inhibitors of 5-alpha reductase (5-ARI), antibiotics by systemic route or anti-inflammatory drugs;
- absence of stone in bladder (by ultrasound assessment);
- negativity to Chlamydia Trachomatis test, Ureaplasma Urealyticum and Neisseria Gonorrhoeae;
- International Prostate Symptom Score (I-PSS) equal to zero.

#### Results

The dosage of PSA was performed at laboratories of our hospital at the time of the enrollment visit, at the first visit (D0), at the first check-up visit after 90 days (D90) and at the second check-up visit after 120 days (D120). At D90 the PSA in 18 patients had a reduction of 33.5% and in 3 patients had a reduction of 15.3%. In one patient, the PSA did not have a significant reduction (0.9%), while in 4 patients there was a 39.3% increase. For this reason, these patients left the protocol and were subjected to multi-parametric magnetic resonance imaging (mpMRI) using the Prostate Imaging-Reporting and Data System (PI-RADS) v2.1. In 3 patients PI-RADS score was 3, while in one patients the score was 4. At D120 the PSA has remained stable in all patients without significant changes, while in 3 patients there was a slight increase (1.4%). No gastric or general side effects have been noticed during whole clinical study.

#### Discussions

Flower pollen extracts have provided evidence for efficacy and tolerability for the treatment of BPH and chronic prostatitis. Flower pollen extract is an effective anti-inflammatory nutraceutical product, thanks to inhibition of prostaglandin and leukotrienes synthesis as well as the inhibition of many cytokines as NF-kB (nuclear factor kappa-light-chain-enhancer of activated B cells) [6]. Lowering of PSA levels it can be useful to discriminate patients with asymptomatic BPH from those who need further tests like mpMRI or prostate biopsy. A limitation of the study was the low number of the patients. More randomized studies should be carried out to clarify the precise role of these active ingredients and their interactions.

#### Conclusion

In literature, flower pollen extracts and other nutraceutical products have shown the improvement of urinary symptoms and overall quality of life of patients affected by BPH [7]. This can be demonstrated with a significant reduction in PSA as an index of prostate inflammation. Therefore, this therapy can be useful to discriminate against patients with PSA in "gray zone" who need further assessments.

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# Comunicazioni 2 - Urolitiasi e Incontinenza Urinaria: approcci mininvasivi

## 1. #239: SUPINE PERCUTANEOUS NEPHROLITHOTOMY IN HORSESHOE KIDNEYS? RESULTS OF A MULTICENTRIC STUDY

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### Objective

To report on the outcomes of Percutaneous Nephrolithotomy (PCNL) in Horseshoe Kidneys (HSK) in 12 different institutions worldwide and evaluate the impact of positioning during surgery.

### Discussions

Our study shows that PCNL in HSK is a relatively low frequency procedure. However, it is a safe and effective treatment with a low rate of complications. Higher BMI and stone size impacted negatively outcomes and supine positioning was associated to a lower operative time.

### Conclusion

Moreover, it breaks the paradigm that PCNL in HSK should only be done in prone positioning through the upper pole, since supine and prone groups had similar outcomes. Patient positioning during PCNL in HSK could be chosen according surgeon preference.

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## 2. #186: CLINICAL AND PSYCHOLOGICAL OUTCOMES OF PATIENTS UNDERGOING RETRO- GRADE INTRARENAL SURGERY AND MINIATURISED PERCUTANEOUS NEPHROLI- THOTOMY FOR KIDNEY STONES. A PRELIMINARY STUDY OUTCOMES OF SURGERY FOR KIDNEY STONES

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### Objective

Objective: To assess disease-specific and health-related QoL, anxiety and depression as well as satisfaction regarding RIRS and mPCNL intervention for kidney stones up to 2.5 cm. Secondly, pain as well as perioperative and postoperative patient outcomes were evaluated.

### Conclusion

These results open new scenarios in the treatment of kidney stones up to 2,5 cm when RIRS and mPCNL have interchangeable indications. Since in our experience complications and success rate are similar, the surgical choice of switching from RIRS to mPCNL in real-time and viceversa may be proposed to the patient in the preoperative counseling.

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### 3. #121: THE USE OF AUTOEXPANDABLE URETERAL PROSTHESIS ALLIUM FOR THE POST URETERORENOSCOPIC URETERAL STRICTURES TREATMENT

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#### Objective

Ureteral strictures are severe and difficult to treat disorders and significantly affects the quality of life of patients. Usually the definitive resolution required laser incision or surgical reconstructive procedures or ureteral stent replacement. In our experience we evaluate the use of new expandable ureteral stent (ALLIUM®) in the post endourological ureteral strictures as alternative to standard ureteral stent or reconstructive surgery.

#### Materials and Methods

From September 2013 to May 2019, 118 patients were enrolled in the study and underwent to endoscopic positioning of the urinary tract autoexpandable prosthesis Allium® for different ureteral disorders. We selected 54 out of 118 patients with ureteral strictures ost-ureterolithotripsy. In this group the location and the length of the stenosis were evaluated, such as, the presence and the grade of hydronephrosis. In these patients an ureteral balloon dilatation was always performed and the positioning of the Allium was obtaining by both endoscopic and Xray control. The length and the design of the Allium depended on the location and the length of the strictures. All the patients were followed up by ultrasound and KUB after 30, 90 and 180 days. At 6 months the Allium system was removed and patients re-evaluated.

#### Results

In 46 out of 54 patients we removed the Allium at 6 months and 8 patients are still in evaluation. In 36 out of 46 patients (78.2%) we obtained the absence of hydronephrosis at 6 months. 10 patients required reconstructive surgery for the persistence of the strictures. We reported 3 cases of stent migration and no infective complications were reported.

#### Conclusion

The autoexpandable ureteral prosthesis Allium® can be considered an option in the treatment of postoperative ureteral strictures with a success rate of 78.2%. It requires, as usually, a learning curve, it has minimal post-operative complications and lower negative impact on the quality of life of patients. In our experience all the failures and complications were reported in the first period of learning curve.

### 4. #122: THE „GREY ZONE“ OF 10-20 MM KIDNEY STONES: WHAT ABOUT THE EXTRACORPOREAL SHOCK WAVE LITHOTRIPSY RESULTS?

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#### Objective

Based on EAU guidelines the indication for the active removal of 10-20 mm is based on both endourological approach and ESWL. Very often the choice of the treatment depends on the urologist or on the patients preferences. In some cases the indications depends in the availability of instruments but, still the stone free rates and the complication rates of ESWL and endourological approaches, are confusing. Worldwide the number of endourological procedures are increasing, in the treatment of renal stones, reporting high stone free rates and the question if the ESWL is competitive is still on debate.

#### Materials and Methods

We report our experience in a single Stone Center on 2856 out of 6477 patients with 10 – 20 mm urinary tract stones, using a lithotripter equipped with the EMSE type 220F-XXP. From October 2001 till May 2019, 6477 patients were treated using the Dornier Lithotripter DLS II. We evaluated retrospectively the stone free rates and the complication rates on the group of patients (2856) with a 10-20 mm kidney stone. The inclusion criteria were patients with kidney stones for which ESWL were appropriate. All stone localization and chemical composition were included (whatever Hounsfield Unit).

#### Results

The overall “stone free rate” was equal to 85.0% (2430 out of 2856 patients) after a single treatment. Based on the stone localizations, the 3 month stone free rates, were: in the pelvic stones group 1680 out of 1890 (88.8%), for stones of the upper calyx 93 out of 112 patients (83.0%), for medium calyx stones 58 out of 105 (55.2%), and for lower calyx stones 599 out of 749 (79.9%). 38 (1.4%) out of 2856 patients needed a post ESWL endourological approach to remove fragments blocked in the ureter and 3 patients underwent to double J insertion to treat a clinically evident subcapsular hematoma.

#### Discussions

The results showed a large stone free rates and lower complications rates in the 10-20 mm kidney stones. The evaluation of the results based on the localization indicates good results for lower calyx stones. Therefore, better results could be obtained by the evaluation of HU of the stones and following the best practice rules.

#### Conclusion

In such way, probably, the next guidelines must be redefine the treatment of choice of the “grey zone” of 10-20 mm kidney stones, maintain the leader role of ESWL in the treatment of urinary tract stones.

## 5. #297: ANALYSIS OF REGIONAL WEATHER PARAMETERS IN 2016, 2017, AND 2018 AND CORRELATION WITH EARLY URETERAL WHOLE STENT ENCRUSTATION

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### Objective

Early Whole Ureteral Stent Encrustation (EWUSE) is an uncommon adverse event.(1) Since we observed 5 EWUSE cases occurring all in a very short period after a scorching heat summer in year 2017, we considered weather condition as a possible external risk factor.

### Materials and Methods

We indwelled a JJ ureteral stent (4.7 or 6 Fr), because of stone related hydronephrosis, in 51, 73 and 64 patients respectively in year 2016, 2017 and 2018. None EWUSE cases occurred in 2016, 5 in 2017 (6.8%), and 1 in year 2018 (1.5%). All the EWUSE cases brought the JJ during one or more summer months. All stents were removed before the limit of 180 days suggested by the producer. Stent material was Percuflex with HydroPlus™ coating produced by Boston Scientific. We did not consider patients with encrustation only on distal J that could be simply removed in the endoscopic office. Patients' characteristics (age, sepsis, stone size and position, date of stent indwelling, number of weeks with stent) were considered and regional weather data of year 2016, 2017, and 2018 (obtained from archives available on weather's internet sites) were analyzed.(2) Common weather factors, that may interfere with human hydration, such as Temperature (maxim, medium and minimum) (Tmx, Tmd, Tmn) in Celsius (°C), Dew Point (DP) in °C, Relative Humidity (RH) in percent, Wind Velocity (WV) in km/h and Atmospheric Pressure (AP) in mbar were considered. RH is the ratio between amount of moisture in air to the maximum amount of water the air can absorb. DP is the temperature at which liquid first forms from a vapor. DP changes linearly for every given RH level. Since in 2016 we did not register any EWUSE cases, we fixed as thresholds the average highest temperatures and the average lowest DP and RH, that were all happening in July 2016. We counted the days in each month with DP, RH inferior and Tmx, Tmd, Tmn superior to the thresholds.

### Results

Summer weather condition of year 2016 and 2018 were similar. Interesting differences were found in summer 2017 for DP, RH, Tmx, Tmd, and Tmn showing that it was warmer and drier, and warmer and drier for a longer period. Furthermore on August 2017 the temperature went on increasing and RH and DP decreasing comparing to the already hot and dry July 2017, while generally the apex of temperatures happens on July. Average Tmx in August 2017 was 3.5°C more than August 2016 and even 1.2°C more than July 2017). In year 2017 the number of days with Tmx, Tmd, Tmn superior to our thresholds (31, 26, 21°C) were respectively: 8|9|9 days in June; 17|19|18 July; 15|21|20 August; 1|2|5 September. Which means that July and August 2017 had together 40 days with temperature higher than the thresholds and in those months for 13 days Tmx was over 35°C. The number of days in 2017 with DP, RH inferior to our thresholds (16°C, 55%) were: 26|14 in June; 26|27 July; 26|27 August; 25|8 September. Which means that almost all July and August 2017 were under the thresholds for DP and RH, and almost all June and all September were with DP under the threshold. While the analysis of WV, AP and patients' characteristics did not show any interesting result. The 5 EWUSE patients occurred in year 2017 had no metabolic factor causing stone formation, while the only EWUSE case of year 2018 had hyperuricemia has metabolic factor. Only 3 encrustation from the EWUSE cases were analyzed and all of them were brushite (Calcium hydrogen phosphate; CaHPO<sub>4</sub>.2H<sub>2</sub>O).

### Discussions

In the recent years many articles are trying to correlate weather parameters to the incidence and prevalence of human diseases. Stone formation has a known multifactor etiology, an important role it has always been given do the income of daily water intake and the hydration status of the patient because highly concentrated salts and slow flow of urine in the collecting system facilitate precipitation of crystals and stone formation.(3)

"Stifling heat" is when both Temperature and RH are high. In this condition people suffer the heat and the sweat cannot evaporate easily from the body, because of the amount of moisture already present in the air.

"Scorching heat" is when, at a generally low RH, the Temperature is high and the DP is low. In this condition, in order to decrease the body temperature, the thermoregulation system induce sweating that immediately evaporate facilitating fast dehydration.

### Conclusion

The 5 EWUSE patients (6.8% of the indwelled stent in year 2017, but also 28% of the indwelled stent in summer 2017) brought the stent during August and September 2017, and 3 of them also during July 2017, which were the months with the highest number of days with DP, RH and temperatures over the thresholds. Results show that the "Scorching Heat" (high temperatures united with low RH and low DP) registered for so many days during summer 2017 acted as an external risk factor facilitating dehydration due to increased perspiration for thermoregulation. Patients carrying stent should be advice to avoid condition that facilitate dehydration and increase water daily intake.

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## 6. #148: CARBON AND ZEOLITE IMPREGNATED POLYESTER FABRIC INHIBITS URINE ODOUR: A RANDOMIZED EXPERIMENTAL STUDY

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### Objective

Bladder cancer ranks fifth as the most common cancer in the world. Many individuals with bladder cancer have undergone a surgical urostomy and often complain of being self-conscious of the unpleasant smell of their own urine. The focus of this study was to test the efficacy of a pouch cover made of a carbon and zeolite containing polyester material to inhibit the smell of urine by comparing two trained dogs' response time in detecting volatile organic compounds (VOCs) in urine(1-2), with and without the fabric covering the samples.

### Materials and Methods

This study used a randomized, blinded experimental design to evaluate the efficacy of a fabric to interfere with two highly trained dogs' ability to detect specific VOCs present in the urine of prostate cancer patient. Ninety urine samples were analysed in this study.

### Results

Prior to the experiment, both dogs accurately detected VOCs in the uncovered test urine samples of men with prostate cancer with a sensitivity and specificity of nearly 100%. Both dogs recognized the "uncovered" urine samples of men with prostate cancer within two seconds. When the test sample was covered with the study fabric, the test urine samples were detected within 30-40 seconds and in some instances the dogs were not able to identify the covered samples, whatsoever.

### Discussions

The findings of this study demonstrate that the carbon and zeolite containing polyester fabric did significantly interfere with the ability of the dogs to detect VOCs in urine of men with prostate cancer

### Conclusion

The fabric may show promise as a pouch cover in controlling offensive urine odour which many ostomates experience.

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## 7. #262: ADJUSTABLE SINGLE INCISION SLINGS FOR FEMALE STRESS URINARY INCONTINENCE: A SINGLE CENTER STUDY

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### Objective

Stress urinary incontinence (SUI) is a common problem worldwide. The aim of this study is to assess middle-term results of the adjustability single incision TOT sling (Altis) in patients with of stress urinary incontinence.

### Materials and Methods

A consecutive series of female patients with SUI were enrolled from 2014 to 2016. Patients with neurogenic UI were excluded from the analysis. All patients underwent Altis Single Incision Sling System with or without O. Patient-reported cure rate, objective cure rate and complications were reported at 1 and 2 years.

### Results

Overall 30 patients with a mean age of 55 years (Range: 36-79) were enrolled. Mean operating time of sling procedure alone was 11 minutes All patients completed the follow up period of 24 months. Overall success rate was 83%, improved rate was 4% and failure rate was 3%. Complications included 3 patients with mesh extrusion solved with estrogens while no voiding difficulties and no dysuria were recorded.

### Conclusion

SIMS-Altis is safe and effective in the treatment of female stress urinary incontinence. The results of the study suggest that the adjustability single incision sling (Altis) can be considered a minimally invasive TOT with no-needles and maintaining similar cure rates. Further randomized clinical trials should confirm our results.

## 8. #313: PELVIC FLOOR MUSCLE TRAINING AFTER RADICAL PROSTATECTOMY: IS THERE ANY DIFFERENCES WHEN WE COMPARE RETROPUBIC RADICAL PROSTATECTOMY WITH LAPAROSCOPIC RADICAL PROSTATECTOMY?

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### Objective

To evaluate the effectiveness of pelvic floor muscle training (PFMT) for treating urinary incontinence (UI) after radical prostatectomy (RP), both retropubic radical prostatectomy (RRP) and videolaparoscopic radical prostatectomy (VLRP).

### Discussions

Open retropubic radical prostatectomy has been the "gold standard" treatment for locally confined prostate cancer (PCa) but in recent years minimal invasive techniques as laparoscopy and robot-assisted prostatectomy have become widely available. The trifecta of the surgical treatment of PCa is cancer control, the preservation of continence, and erectile potency (1). Incontinence after RP (P-RP-I) varies widely (2% to p≤60%) according to the definition and quantification of incontinence, timing of evaluation, and who evaluates (physician or patient) (2). Conservative treatments, including pelvic floor muscle training (PFMT), anal electrical stimulation (AES), lifestyle adjustment, or combination are usually recommended at first for P-RP-I (3). In our study we compare the benefits of PFMT on P-RP-I after retropubic radical prostatectomy and after laparoscopic radical prostatectomy. We found an earlier (after 1 month) recovery of continence in patients underwent retropubic radical prostatectomy vs laparoscopic approach but, after 6 months the results were the same. Just one patient in RRP group and one patient in VLRP group manifested a high grade UI at six months, but they both had adjuvant radiotherapy.

### Conclusion

As is known, PFMT is an effective treatment for urinary incontinence in men after radical prostatectomy (4). There were no differences between RRP group patients and VLRP group patients in terms of long-term results.

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# Comunicazioni 3 - Bladder Destiny

## 1. #167: ASSESSING THE IMPACT OF ABSENCE OF DETRUSOR MUSCLE IN TA-LG UROTHELIAL CARCINOMA OF THE BLADDER ON RECURRENCE FREE SURVIVAL

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### Objective

Obtaining detrusor muscle in TURBt specimen is recommended by European Association of Urology guidelines. Few studies assessed this specific topic in the setting of Ta low-grade (LG) urothelial carcinoma (UC) of the bladder. The aim of this study was to assess if the absence of detrusor muscle at pathologic report has a negative impact on recurrence free probability in patients with a Ta LG UC of the bladder.

### Materials and Methods

A multicenter TURBt database was queried for: "low-grade Ta, UC of the bladder". All patients treated between 2008 and 2018 with tumor grade assessed according to both ISUP and WHO grading systems and with a minimum follow-up of 1-yr were included. Patients with previous history of high-grade UC were excluded. Baseline demographic, clinical and pathologic data were analyzed. EORTC risk group was recorded. Kaplan-Meier analysis was performed to assess the predictive role of clinical and pathologic data on Recurrence-Free Survival (RFS) probability, computed at 12, 36, 60 months after TURBt.

### Results

Overall, 203 consecutive patients were included. Most of them were men (84%), median age was 69 yrs (IQR: 61-77). Patients and tumors characteristics were reported in Table 1. At Kaplan-Meier analysis low-risk EORTC cohort displayed a significantly higher RFS probability compared with intermediate-risk cohort (5-yr probability 89.5% vs 72.4%, respectively; log-rank  $p=0.011$ , Figure 1a). At univariable Cox regression multiple tumors (HR 1.36, 95%CI 1.02-1.82;  $p=0.037$ ), tumor diameter  $\geq 3$ cm (HR 2.8, 95%CI 1.01-7.9;  $p=0.049$ ), previous history of UC  $\leq 1$  yr (HR 1.96, 95%CI 1.02-3.75;  $p=0.043$ ) and combined EORTC risk group (HR 3.15, 95%CI 1.23-8;  $p=0.017$ ) were significant predictors of recurrence. Absence of detrusor muscle at pathologic report (HR 1.45, 0.61-3.45;  $p=0.4$ , Figure 1b) and adjuvant intravesical treatments (HR 0.95, 95%CI 0.5-1.78;  $p=0.87$ ) had negligible impacts on RFS probabilities (Table 2).

### Conclusion

EORTC risk group is a strong predictive tool to assess the risk of recurrences in patients with Ta-LG UC of the bladder. Absence of detrusor muscle in the TURBt specimen has negligible role on recurrence of patients with Ta-LG tumors, therefore it should no longer be considered as a mandatory data to assess prognosis or treatment schedule.

## 2. #266: NARROW BAND IMAGING REDUCES PERSISTENCE OF CANCER IN PATIENTS WITH PT1 HIGH GRADE BLADDER CANCER

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### Objective

To evaluate persistence rate on repeated transurethral resection of the bladder (re-TURB) 6 weeks after the first TURB in patients with pT1HG disease undergoing resection of the margins and bed on Narrow Band Imaging.

### Materials and Methods

A consecutive series of patients undergoing TURB and a diagnosis of pT1 high grade disease were prospectively enrolled. On initial TURB patients underwent classic white light resection of the tumour followed by narrow band image (NBI) resection of margins and bed. After 6 weeks from the initial TURB, patients underwent a re-TURB under white light. Persistence rates on

re-TURB were recorded.

#### Results

Overall 797 patients underwent TURB, out of them 126 patients with pT1 high grade disease were included in the study. The total number of lesions was 226 meaning 1.79 lesions per patient. On re-TURB 24/126 (19%) of the patients presented residual disease with a total of 28/226 (12%) lesions identified. All these patients presented a pTa residual disease. Out of them 8/21 (38%) presented bladder cancer on the resection bed and 13/21 (62%) presented bladder cancer on margins.

#### Conclusion

Narrow Band Imaging trans-urethral resection of the bladder is an oncological effective procedure in the treatment of pT1HG disease. The procedure has a 19% of persistence rate which is inferior when compared to the available evidence on white light TURB. Further multicenter studies are needed in order to validate our results.

## 2. #153: COLLINS LOOP EN BLOC RESECTION( CLEBR) FOR ACCURATE STAGING OF PRIMARY NON MUSCLE INVASIVE BLADDER CANCER: OUR EXPERIENCE

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#### Objective

A primary aim of transurethral resection of bladder (TURB) tumors is to determine the depth of invasion or clinical stage. Transurethral resection is a stochastic procedure subject to variations in tumor type, surgical technique and pathological evaluation. Exact pathological staging of bladder cancer is crucial for determination of further treatment. A limiting factor is the surgical 'incise and scatter' technique that might contribute to tumour recurrence. We present our results with using a Collins loop (with a cutting current) en bloc resection (CLEBR-ET) of bladder tumours for treatment and accurate staging of solitary transitional cell carcinoma of the bladder.

#### Materials and Methods

January 2015 – December 2019, 134 patients (96 male – 38 female) with non muscle-invasive bladder cancer (NMIBC) underwent transurethral en bloc resection using a Collins Loop. Tumor size ranged to 0.5- 45 mm and multifocality was present in 6% of cases. En bloc resection was applied on all of the tumours. On 118 of the 134 patients, a re-TURB was performed after 6 weeks. The bladder wall is incised around the lesion using a Collins loop, starting from apparently "normal" mucosa surrounding the base and then extending through the subepithelial connective tissue, muscularis mucosae and muscularis propria strata. The resected 1-piece specimen was grasped with a loop electrode and retrieved. After bladder tumor resection the resected base was observed carefully to assess perforation and bleeding. When the tumor size was greater than 3 cm, excision of the lesion could be easily achieved by mean of a resectoscope with a 5 mm working channel. After resection, the lesion is grasped with the forceps and retrieved with the resectoscope. All cases of high-risk NMIBC underwent second-look after 30-45 days.

#### Results

Pathology reported urothelial carcinoma with low grade stage Ta, T1 high -grade and T2 high-grade respectively in 76 (56,7%), 46 ( 34,3%), 12 ( 8,9%). All of the resected specimens provided detrusor muscle, No uncontrollable bleeding, perforation or other serious complications were observed. To date, with a mean follow up of 16.5 months, the recurrence rate in patients with NMIBC is 13.5%

#### Discussions

TURBT is a procedure with a varied outcome in terms of adequacy of resection, recurrence and progression. There is no clinical yardstick to judge the completeness of resection. There are a few surrogate markers to assess adequate resection such as presence of detrusor muscle in the specimen and the rate of subsequent recurrence. Successful management of bladder tumors (particularly non-muscle-invasive tumors), relies on adequate initial resection and accurate histological diagnosis. An ideal TURBT would mean complete resection of the visible tumor, resection of the surrounding healthy looking mucosa for up to 1 cm and then the removal of detrusor muscle. Herr and Donat described three ways to measure the quality of a good TURBT, i.e., complete resection, presence of deep muscle in the specimen and the rate of recurrence at the site of previous TURBT. [1] They also suggested classifying tumor resection as R0; microscopic negative margin, R1 with microscopic positive margin and R2 that is macroscopic positive margin. This kind of assessment is not practical in CT, but could be possible in en-bloc resection, where we can have a piece of tumor tissue, which has all three layers, i.e., urothelium, lamina propria and detrusor muscle in contiguity. The outer-most surface of the detrusor muscle in the resected specimen could then be inked to assess margin status and thereby discerning a true perspective of level of resection, i.e., R0-R1. Inadequacy of CT is not only judged by absence of detrusor muscle in an initial specimen, but also by the rate of recurrence. Recurrence is seen in 50-70% of non-muscle invasive bladder cancer, mostly during the 1 st year. These may be due to incomplete resection, cell implantation or the tumor biology itself. [2] Incomplete resection seems to be the most important reason for the recurrence. In a review of seven randomized controlled trials, after controlling established factors for recurrence such as tumor size, multiplicity, stage and grade, it was concluded that a wide range of recurrence rate, i.e., 0-46%, was due to the difference in quality of resection. [3] Inadequate resection leading to higher rate of recurrence at the same site is supported by another study where 81% of recurred tumor occurred at the site of previous resection. [4] Various techniques using different kinds of loops and laser have been described to improve the quality of TURBT. En-bloc resection technique is one of the ways to provide better pathological evaluation for Ta and T1 tumors. In a study on ET, a flat loop electrode was used to resect tumors of less than 2.5 cm. [1] Although the authors did not describe presence or absence of detrusor muscle in the resected specimen, they concluded that invasion of lamina was better delineated with en-bloc resection. A

limitation of this technique was the inability to use a flat loop for tumors located at the anterior and upper posterior wall. Another limitation was that tumor of more than 2.5 cm was considered a contraindication. Regarding the learning curve, CLebR-ET is rather more controlled technique of resection than CT as it gives better hemostasis and thereby a good vision, which is crucial to avoid complications. Depth of the resection could also be modified with ET and it does not take more than three cases to get a knack of this technique if it is started with a relatively small tumor.

#### Conclusion

CLebR has been proven safe and effective for both, treatment and pathological staging of NMIBC; therefore could be an appropriate tool for accurate staging with possibly lower scattering potential for the assessment and treatment of patients with NMIBC. The objective advantage of accurate pathological examination (identification of microfocal invasion of lamina propria or of muscular wall, surgical margins assessment) is associated with a substantial safe technique. Long term data and larger dataset of cases are necessary to demonstrate an advantage in terms of recurrence or progression.

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### 3. #264: DEPTH OF INVASION AS A POTENTIAL PREDICTOR OF RECURRENCE IN PATIENTS TREATED WITH ENBLOC-TRANSURETHRAL RESECTION OF THE BLADDER: A FEASIBILITY STUDY

Roberto Giulianelli<sup>1</sup>, Luca Albanese<sup>1</sup>, Ana Ludy Lopes Mendes<sup>1</sup>, Luca Mavilla<sup>1</sup>, Luca Albanese<sup>1</sup>, Riccardo Lombardo<sup>1</sup>, Barbara Cristina Gentile<sup>1</sup>

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#### Objective

As for other tumors it is likely that depth of invasion is a prognostic factor for disease recurrence and progression in high grade pT1 urothelial bladder cancer. To date no anatomy based neither dimensional subclassification proved reliable correlation with recurrence and progression, mainly considering the high interobserver variability in pT1 diagnosis, based by the TURB resection technique intrinsic artifact. Aim of this study is to assess the feasibility of measuring depth of invasion of urothelial carcinoma in patients undergoing EB-TURB for pT1HG disease.

#### Materials and Methods

27 patients undergoing EB-TURB with Collins knife and with pT1-HG disease were included. A second TURB was performed after 4-6 weeks from the first one. A dedicated pathologist assesses the feasibility of depth of invasion measurement

#### Results

Overall 32 patients with pT1HG disease were enrolled. EB-resection was adequately performed in 27/32 (85%) of the patients. Overall 40 lesions were identified with a median tumour size of 2 cm (1/4). Median depth of invasion was 1.35 mm (0.48/3.5). Deepness measurement was feasible in 100% of the patients and in 100% of the lesions. As well on re TURB 8/27 (29%) patients presented residual disease and in 100% of these patients it was possible to measure depth of invasion with a median value was 1.1 mm (0.43/2.3). Limitations include number of patients.

#### Conclusion

In specimen obtained from EB-TURB measurement assessment proved to be easy and highly reproducible. Recruitment of patients is still ongoing to evaluate an eventual prognostic value of neoplastic invasion in recurrence and progression.

### 4. #285: SQUAMOUS VARIANT OF BLADDER CANCER AND COLON ADENOCARCINOMA WITH UNUSUAL PRESENTATION OF HEPATIC METASTASES: A CASE REPORT

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#### Objective

Primary squamous cell carcinoma of urinary bladder is a rare disease variant, accounting for less than 5% of all primary bladder cancers [1]. The diagnosis of bsc is based on criteria established by the World Health Organization classification system

[2] and it is a poorly differentiated tumor, it usually progresses rapidly and it characterizes by a worse prognosis than the most frequently represented bladder carcinoma, the urothelial carcinoma (UC) [3]. We report an unusual episode of a patient with squamous cell carcinoma of urinary bladder and contemporary adenocarcinoma of the descending colon asymptomatic, discovered in stages of staging and subsequently of hepatic metastases from colon adenocarcinoma. the patient underwent radical surgical therapy, ureterocutaneostomy and later chemotherapy for metastases

#### Materials and Methods

The case report we are talking about concerns a 74-year-old patient, woman, who came to our attention for recurrent hematuria episodes, for several months (maybe eighteen), which have been treated with empirical antibiotic therapy (by general practitioner) without, however, investigate further with at least a radiological examination. After first stadiative investigations, the patient was diagnosed with a primary squamous bladder and a metacronous colon adenocarcinoma too, completely asymptomatic, so considered as an incidentaloma in the radiological diagnosis of staging. The complete diagnosis was obtained by ultrasound, cystoscopy, trans urethral bladder resection, colonoscopy with biopsy and PET / CT (by using fluoro-deoxyglucose as radiopharmaceutical). In 2017 the patient underwent transurethral resection of bladder cancer (TURBT) at our institution; the histological diagnosis elaborated was "Solid urothelial carcinoma (G3), with marked squamous differentiation infiltrating also the muscular tunic present". Subsequently the patient was subjected to a stadiative PET/CT, which showed presence of a descending colon circular neoformation. The patient was then subjected to a colonoscopy [Image 1], which confirmed the PET/CT (F-18 + FDG) suspected diagnosis, finding a circular lumen stenosing and ulcerated lesion, 40 cm away from the anal margin, and the lesion did not allow flexible endoscope further transit. Moreover, thanks to sub optimal intestinal cleansing (Boston Score = 3, as the other two traits score were not assigned), it was possible to appreciate the presence of a pedunculated polyp (size 8mm), 10 cm away from the anal margin, despite the numerous and persistent diffuse intestinal musculature's spasms. During endoscopy, several biopsy samples were taken by the descending colon stenosing lesion, and the histological examination (in GB staining) revealed as outcome adenocarcinoma tissue. In January 2018 the patient underwent radical cystectomy with ureterocutaneostomy, partial colon resection with termino-terminal anastomosis, left lymphadenectomy and enlarged hysterectomy with partial vaginectomy. The histological report of the surgical specimen confirmed transurethral resection (TURBT) previous report: "solid urothelial carcinoma (G3) with marked squamous differentiation with muscular tunic infiltration". Colon resection showed the presence of adenocarcinoma, the surgical resection margin was negative. No infiltration of tumor cells was found in the uterus, in the excised appendages, in the anterior wall of the vagina and no involvement of the nearby nodes was detected. The patient performed both PET / CT (F-18 + FDG) and abdomen ultrasound six-month follow-ups. In February 2019, PET / CT (F-18 + FDG) detected, in the liver, altered glucose metabolism in some areas as VII (SUV max 5.31), VIII (SUV max 11.5 vs 3.91 previous PET control on 07/05/2018), III segment (SUV max 11.6) and in VI segment (SUV max 6.92) [Image 2 – 3]. The remaining examined body areas were negative, within the methodic's limits. In March 2019, the patient underwent liver lesions' biopsy, shown by the PET/CT (F-18 FDG) last February, which confirmed the presence of liver metastases, of intestinal origin, with adenocarcinoma metastasis' characters. Since May 2019 She has undergone chemotherapy cycles, with Folfox protocol (5-fluoro-uracil, folinic acid, oxaliplatin), currently the patient is still receiving therapy (with poor performance status and poor compliance) and she is monitored with general follow-ups.

#### Results

The patient after the surgical phase had a recovery without complications. The management of ureterocutaneostomy was home-based and all tests were negative until the appearance of asymptomatic liver metastases.

#### Conclusion

The patient had a long disease-free duration after radical surgery. The presentation of hepatic metastases observed in our case was an event that emerged in the less-awaited follow-up compared to the possibility of local secondary or recurrence that we would have expected from the squamous cell carcinoma of urinary bladder.

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# Video 2 - Chirurgia di precisione (Laparo e non solo)

## 1. #157: LINFOADENECTOMIA RETROPERITONEALE ROBOT-ASSISTITA PER MASSA RESIDUA POST CHEMIOTERAPIA IN PAZIENTE TRATTATO PER NEOPLASIA GERMINALE MISTA (CARCINOMA EMBRIONALE + TERATOMA POST-PUBERALE) DEL TESTICOLO SINISTRO

Alessandro Izzo<sup>1</sup>, Giovanni Grimaldi<sup>1</sup>, Giuseppe Quarto<sup>1</sup>, Raffaele Muscariello<sup>1</sup>, Luigi Castaldo<sup>1</sup>, Dario Franzese<sup>1</sup>, Martina Perra<sup>1</sup>, Sisto Perdonà<sup>1</sup>

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Il video descrive la tecnica utilizzata presso il nostro Istituto per il trattamento chirurgico Robot-assistito per masse residue post-chemioterapia per tumore a cellule germinali del testicolo. Il caso rappresentato riguarda un uomo di 23 anni sottoposto a ottobre 2018 a orchifunicolectomia sinistra diagnosi istologica di neoplasia germinale mista (carcinoma embrionale 50% e teratoma maturo post-puberale 50%) con presenza di invasione linfovaskolare. TAC e PET-FDG post-operatorie negative. Sottoposto a tre cicli di PEB. Al follow-up esibisce FDG PET/TC con evidenza di due lesioni ipodense a contenuto colliquativo necrotico in sede paraortica sinistra entrambe di circa 3 x 2 cm di diametro. Markers negativi. Il paziente è stato sottoposto il 7 novembre 2019 a Linfoadenectomia Retroperitoneale Robot-assistita attraverso il Sistema Robotico Davinci Xi secondo il template dello Weissbach study che include, a sinistra, l'asportazione dei linfonodi pre-aortici, para-portici e retro-aortici, interaorto-cavali. Il limite craniale è rappresentato dalla vena renale di sinistra, quello caudale dall'arteria mesenterica inferiore, il limite laterale dall'uretere. La linfoadenectomia comprende anche i linfonodi iliaci comuni di sinistra. Il tempo di console è stato di 76'. Le perdite ematiche: 100 cc. Il paziente è stato dimesso in seconda giornata. In attesa di esito istologico.

## 2. #317: LAPAROSCOPIC PYELOPLASTY: OUR EXPERIENCE

Willy Giannubilo<sup>1</sup>, Giuseppe Sortino<sup>1</sup>, Maurizio Diambri<sup>1</sup>, Andrea Marconi<sup>1</sup>, Manuel Di Biase<sup>1</sup>, Vincenzo Ferrara<sup>1</sup>

<sup>1</sup> "Carlo Urbani" Hospital (Jesi)

In this video we show our experience with laparoscopic pyeloplasty in the treatment of pyeloureteral junction obstruction. We describe the technique of laparoscopic dismembered Anderson-Hynes type pyeloplasty. Our technique always involves a trans peritoneal approach with 3 trocars. a mono J stent is always placed before surgery. Laparoscopic pyeloplasty has become the operation of choice in cases of hydronephrosis secondary to crossing vessel, when there is great pyelic dilation, and for the treatment of failures of previous endopyelotomy.

## 3. #222: HYDRONEPHROSIS AS AN UNUSUAL PRESENTATION FOR METASTATIC LOBULAR BREAST CANCER

Carlo Introini<sup>1</sup>, Antonia Di Domenico<sup>1</sup>, Marco Ennas<sup>1</sup>, Martina Beverini<sup>1</sup>, Fabio Campodonico<sup>1</sup>, Mariangela Rutigliani<sup>1</sup>, Francesco Paparo<sup>1</sup>

<sup>1</sup> E. O. Ospedali Galliera (Genova)

We present here the first-reported case of tubal metastasis from lobular breast cancer diagnosed by the incidental finding of hydronephrosis. A 61-year-old woman suffering from left hydronephrosis was referred to us 4 years after she underwent a right radical mastectomy and subsequent radiotherapy for lobular breast carcinoma. The CT scan revealed a left hydronephrosis with dilated ureter up to the proximal third, where thickening of the walls was not excluded. An exploratory laparoscopy was performed and the definitive histopathology examination showed a recurrence of the initial carcinoma with a right tubal metastasis and peritoneal carcinosis. The eventuality of such an unusual site of metastasis should be remembered.

#### 4. #165: NEAR-INFRARED FLUORESCENCE IMAGING TECHNOLOGY APPLICATIONS IN UROLOGIC SURGERY

Riccardo Mastroianni<sup>1</sup>, Gabriele Tuderti<sup>1</sup>, Umberto Anceschi<sup>1</sup>, Alfredo Bove<sup>1</sup>, Aldo Brassetti<sup>1</sup>, Mariaconsiglia Ferrero<sup>1</sup>, Giuseppe Simone<sup>1</sup>

<sup>1</sup> "Regina Elena" National Cancer Institute (Roma)

In this video we collected multiple clinical applications of NIRF technology: ICG-marking of totally endophytic renal tumors selected for partial nephrectomy, assessment of thrombus extent during level III IVC tumor thrombectomy, identification of functioning adenomas during adrenal surgery, assessment of ureteral vascularization during robot assisted radical cystectomy and during ureteral reimplantation, identification of urethra and ejaculatory ducts during Madigan prostatectomy.



# Comunicazioni 4 - Tutto Rene

## 1. #170: LIQUID BIOPSY IN CLEAR CELL RENAL CELL CARCINOMA: URINARY MIR-210-3P AS EMERGING SPECIFIC BIOMARKER

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### Objective

The most common subtype of renal cell carcinoma (RCC) is clear cell RCC (ccRCC) that accounts for 70-80% of all renal malignancies. To date, no useful markers are available in clinical practice for early diagnosis and for optimal patient stratification. MicroRNAs, a class of small non-coding RNA, are emerging as promising molecules in the management of urological tumors suggesting the possibility of using them as non-invasive biomarkers. The aim of this study is to evaluate whether miR-210-3p may be an accurate non invasive diagnostic and prognostic biomarker for ccRCC patients.

### Materials and Methods

This study includes a cohort of 21 ccRCC cases underwent radical or partial nephrectomy. We analyzed by RTqPCR miR-210-3p levels in neoplastic and healthy tissues and in urine specimens collected at surgery and during follow-up visits (from 3 to 24 months) of all ccRCC cases, of which 18 disease-free patients and a small subgroup presenting metastatic progression. Urine samples were also collected from 16 healthy donors with similar demographic features. The specimens were frozen within 30 minutes from collection and stored at -80°C until RNA extraction and microRNA expression analysis.

### Results

miR-210-3p was upregulated in ccRCC frozen tissues compared to matched normal counterparts. Next, we evidenced that miR-210-3p resulted significantly up-regulated in urine specimens collected from ccRCC patients at the time of surgery, compared to healthy samples. Of note, miR-210-3p levels resulted significantly reduced in urine samples from disease-free patients during follow-up, compared to the baseline levels (time of surgery). In a small subgroup of patients presenting metastases, the urine levels of miR-210-3p increased and, interestingly, again decreased when responding to medical treatments.

### Conclusion

This pilot study highlights the relevance of secreted miR-210-3p as powerful non invasive diagnostic and prognostic biomarker for ccRCC patients, with potential clinical applications from diagnosis to treatment.

## 2. #301: PREDICTIVE FACTORS OF RENAL FUNCTION IMPAIRMENT AFTER 18 MONTHS IN PATIENTS UNDERGOING LAPAROSCOPIC PARTIAL NEPHRECTOMY

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### Objective

Currently there are no indications about nephrologic consult in patients undergoing partial nephrectomy (PN) at risk of chronic kidney disease. The present study has the purpose of identifying the predictive factors of significant fall in eGFR below 60 mL/min after 18 months (eGFR18) in patients undergoing laparoscopic partial nephrectomy. The analyzed variables are: pre-operative creatinine, age at the time of surgery, Padua score, RENAL nephrometry score, gender and the percentage change in perioperative creatinine (from before the surgery to 72h after).

### Discussions

According to EAU guidelines, the choice therapy for T1a and T2b tumors is PN due to the lower morbidity compared to radical nephrectomy (RN)<sup>1,2</sup>. Despite the fact that PN preserve renal function more than RN, the former procedure still exposes the patient to the risk of renal filtration's fall. In fact, many studies in the last years had the purpose of disclosing the risk factors for renal function impairment after PN<sup>3-8</sup>.

Preoperative creatinine, as said before, was found not significant at univariate analysis (p=0,0792) but, at multivariate, using 0,95 mg/dl as threshold it was the only significant variable (p=0,0205, OR=18,2). We speculated that because creatinine values, in

our sample, were not pathological as one inclusive criterion was preoperative eGFR  $\geq 60$  mL/min, it was necessary to split our population to better perform the multivariate analysis. The creatinine threshold was found building the ROC curve, comparing creatinine values to eGFR18, and it resulted that creatinine  $>0,95$  mg/dl had sensitivity of 66,7% and specificity of 73% to identify patients at risk of eGFR18  $<60$  mL/min. The analysis demonstrates that creatinine level is a prominent risk factor for significant renal function impairment also in normal functioning kidneys. We believe that this result is important and reliable, since our population preoperative eGFR is above 60 mL/min and thus with normal renal function.

Padua score demonstrated significant at univariate ( $p=0,0242$ ) but not significant at multivariate ( $p=0,404$ , OR=1,52). RENAL proved to be not significant to both univariate ( $p=0,0942$ ) and multivariate ( $p=0,6653$ , OR=1,21). Despite the results we believe that both scores are important, and the small population played a major role for the outcome as other papers showed a correlation between nephrometric scores and late eGFR9,8. In support of our hypothesis, we highlight that group 1 had higher values in both mean and median for both scores.

Gender proved to be a risk factor at multivariate but without statistical significance, nevertheless it agrees with literature 7,8 ( $p=0,1779$ , OR=5,85).

Age did not demonstrate any correlation with eGFR18, neither at univariate nor at multivariate analysis ( $p=0,6831$ , OR=1,01). Even if group 1 had higher mean and median age the values between the groups were too close to identify any significant difference, and this is likely to be the reason for the result as other studies had a different outcome 3,4,8. Percentage change in creatinine from pre-surgery to 72h after-surgery was not associated with eGFR18 ( $p=0,6855$ ; OR=1,01). This is still a relevant result because, as said previously, we incurred in only 5 AKI stage 1, and therefore the role of AKI in our sample can be considered marginal. For this reason, we speculated that variation in perioperative creatinine, in the absence of AKI, doesn't represent a risk factor and should not alarm the physician, but other investigation should be performed.

#### Conclusion

The present study, despite the small sample and therefore the lack of significance in most statistical analysis, still highlights preoperative creatinine, Padua score, RENAL score and gender as risk factors for significant eGFR18 fall. Furthermore, it seems that percentage change in perioperative eGFR in the absence of AKI is not a risk factor and therefore should not alarm the physician. The age between the two groups is comparable so it was not possible to find any correlation with eGFR18.

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### 3. #161: 15 YEARS OUTCOMES OF LAPAROSCOPIC PARTIAL NEPHRECTOMY: SINGLE CENTER EXPERIENCE

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#### Objective

Although robotic surgery is gaining acceptance, laparoscopic partial nephrectomy (LPN) still remains a viable options to treat patients with cT1-2N0 renal tumors. To minimize ischemic injury to the healthy parenchyma, we pioneered the off-clamp approach and first proposed the preoperative superselective embolization of tumor vessels (SETV)1 in order to decrease intraoperative bleeding. We herein present long term oncologic and functional outcomes after 15 years of LPN.

#### Materials and Methods

Our prospectively maintained institutional database was queried for patients undergone off-clamp LRP with or without SETV before October 2004. Baseline demographic, clinical, pathologic surgical and survival data were collected. Patients with clear cell (ccRCC) and non-clear cell renal cell carcinomas (non-ccRCC) were stratified into risk groups according to the Mayo

Clinic Risk Stratification System (MCRSS)<sup>2</sup> and the University of California Integrated Staging System (UCISS)<sup>3</sup>, respectively.

#### Results

Overall, 73 consecutive patients were included in the analysis. Most of them were men (60%) with a median age of 63 yrs (IQR: 53-70) and BMI of 24.7 (IQR: 21.8-28); 3 (4%) presented with a solitary kidney (Table 1). Median tumor size was 3 cm (IQR: 2-4). SETV was performed in 27 cases (37%). While 23 patients (32%) were diagnosed with a benign tumor, 41 (56%) and 9 (12%) harbored clear cell and non-clear cell cancers, respectively; 6 (8%) of these malignancies were intermediate/high risk (IR/HR) diseases. The positive surgical margins rate was 4% (n=3) and an acute kidney injury occurred in 22% of cases; a new onset CKD  $\geq$  IIIa was observed in 28% (n=21) of patients overall. At 15 yrs, disease-free (DFS), cancer-specific (CSS) and overall-survival (OS) probabilities were 72 $\pm$ 6%, 90 $\pm$ 4% and 65 $\pm$ 8%, respectively. Overall, the rates of distant metastases and recurrence at the tumor bed or at the contralateral kidney were 16 $\pm$ 5%, 1.5 $\pm$ 1% and 20 $\pm$ 6%, respectively (Figure 1-2). At the same timepoint the chances to develop a CKD  $\geq$  IIIa were 22 $\pm$ 2% and these were not affected by SETV (Figure 3; Log Rank p=0.240). On Cox analysis, age was the only predictor of long-term functional deterioration (OR: 1.066, 95%CI: 1.006-1.129; p=0.031). Kaplan Meier analysis identified MCRSS and UCISS as predictor of DFS, CSS and OS probabilities (Figure 1; all p<0.001).

#### Conclusion

We reported 15-yr oncologic and functional outcomes of the largest cohort of patients undergone off-clamp LPN, at a single referral center. According to this report, preoperative SETV seems not to affect long-term kidney function.

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## 4. #160: A NOMOGRAM TO PREDICT DISEASE-FREE SURVIVAL AFTER PARTIAL NEPHRECTOMY: DEVELOPMENT AND INTERNAL VALIDATION

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#### Objective

The best follow-up (FU) strategy following partial nephrectomy (PN) remains unclear. The Mayo Clinic Algorithm (MCA), developed in 2003 on a series of 1671 radical nephrectomies, has not been validated specifically in PN cohorts. We developed a nomogram to predict cancer recurrence after PN.

#### Materials and Methods

Our prospectively maintained database on 1744 partial nephrectomies was queried for "cT1-2N0", "clear-cell renal cell carcinoma" (ccRCC). Uni/Multivariable Cox regression analyses identified predictors of disease-free survival (DFS) which were used to generate a nomogram. The discrimination accuracy was measured by concordance index (CI). Calibration plot was generated with 200 bootstraps resampling to explore nomogram performance and decision curve analyses assessed the net benefit of the model.

#### Results

Overall, 806 patients were included in the analysis. At 12, 24, 36 and 60 months, DFS probabilities were 96 $\pm$ 1, 92 $\pm$ 1, 88 $\pm$ 2, 84 $\pm$ 2, respectively. On multivariable Cox analysis (Table 1), age, male gender, pathologic tumor size, Fuhrman grade, tumor necrosis and positive surgical margins were significant predictors of DFS probabilities. The developed nomogram (Figure 1) had a 0.72 CI and was perfectly calibrated (Figure 2). On decision curve analyses, the net benefit of using the model was evident for probabilities between 10%-50% (Figure 3).

#### Conclusion

This nomogram efficiently estimates DFR probabilities at 12, 24, 36 and 60 months after PN. It could be useful in designing a patient-tailored follow-up schedule based on his individual risk of cancer recurrence, thus avoiding

## 5. #248: A RARE CASE OF A WELL-DIFFERENTIATED NEUROENDOCRINE TUMOR OF THE KIDNEY IN A YOUNG PATIENT: A DIAGNOSTIC CHALLENGE AND SURGICAL MANAGEMENT

Andrea Mogorovich<sup>1</sup>, Massimo Cecchi<sup>1</sup>, Carlo Alberto Sepich<sup>1</sup>, Daniele Summonti<sup>1</sup>, Andrea Di Benedetto<sup>1</sup>, Irene Bardelli<sup>1</sup>, Silvia Pampaloni<sup>1</sup>, Massimiliano Catastini<sup>1</sup>, Luca Lunardini<sup>1</sup>

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### Objective

Neuroendocrine tumors (NETs) are uncommon tumors that exhibit a wide range of differentiation and biological behavior. NETs can arise from any tissue or organ, including organs that do not normally contain neuroendocrine cells.[1] NETs embrace a large spectrum of diseases rarely originating from the kidney (2); they include well-differentiated NET (carcinoid), well-differentiated neuroendocrine carcinoma, poorly differentiated neuroendocrine carcinoma and small cell carcinoma. Renal carcinoids are typically slow-growing tumors with a variable clinical course. We herein report a rare case of well-differentiated NET (carcinoid) in a 17-year-old male along with the immunohistochemical features and a review of the literature.

### Materials and Methods

A 18-year-old male presented with dull pain in the left flank since 9 months. The abdominal examination revealed a big palpable mass in the left abdomen; CT scan showed a huge cystic tumor occupying the entire left part of the abdominal cavity arising from the left kidney with maximum diameter > 30 cm without regional node involvement and distant metastasis.

### Results

US-guided percutaneous biopsy of the neoplasm was inconclusive and the patient underwent surgical removal of a large renal tumor displacing all the surrounding organs in absence of infiltrative growth pattern. The mass was excised by blunt dissection from the kidney allowing to preserve a large amount of healthy renal parenchyma. Gross examination revealed a brown coloured cystic mass with large haemorrhagic areas, apparently surrounded by a fibrous capsule. On microscopic examination there was absence of necrosis and mitotic figures were scant ( $\leq 2/10$  HPF). Immunohistochemically, these tumor cells were diffusely positive for chromogranin, synaptophysin, vimentin, CK8/18 and negative for GFAP, pS100, RCC, PAX-8, WT-1 and CK-7. Ki-67 index was nearly 2%. Thus, a diagnosis of well-differentiated NET was given.

### Discussions

NETs are most commonly seen in the gastrointestinal tract, less frequently in the respiratory system and sporadically in parenchymal organs such as the liver. Primary NETs of the kidney are extremely rare.[2] They can occur in both the renal parenchyma and the renal pelvis.[3]

The pathogenesis of primary NETs of the kidney is still controversial. Neuroendocrine cells have been identified in the renal pelvis but not in the normal renal parenchyma.[4] Different theories support the fact that NETs arise from primitive totipotent stem cells that subsequently differentiate in a neuroendocrine direction. Several mechanisms have been used to explain the origin of such tumors, including metastasis from an occult primary tumor site to the kidney, activation of aberrant gene sequences in a totipotent stem cell line that differentiates into aberrant NET cells, and concurrent renal congenital abnormalities. Some authors think that the tumors arise from neuroendocrine cells occurring in the mucosa of the renal pelvis in intestinal metaplasia.[5]

In 2010, the WHO has proposed a classification system for renal carcinoid tumors that is similar to that of the carcinoid tumors of other organs.[6] They classified neuroendocrine neoplasms into NET-well differentiated grade 1, NET-well differentiated grade 2, NEC-poorly differentiated grade 3 (small and large cell type), mixed adenoneuroendocrine carcinoma, hyperplastic, and preneoplastic lesions. This classification differentiates between NETs and neuroendocrine carcinomas. The proliferation index (Ki-67, MIB-1), angioinvasion, and mitoses are important factors in this classification.

Well-differentiated NET (carcinoid) of the kidney are rare with 4 cm. This could be due to the vacuous nature of the retroperitoneal space as kidneys are essentially retroperitoneal organs.

There is no clear correlation between the histologic features of the disease and prognosis and tumor necrosis is not a predictor of prognosis. Metastatic workup must always be done to rule out the possibility of metastasis from an occult tumor elsewhere when a clinical diagnosis of renal carcinoid is made. Long-term follow-up care is essential because of the prolonged course of disease despite metastasis. The clinical course of renal carcinoid is difficult to predict because of the rarity of the condition; however, it is largely believed to have an indolent course

### Conclusion

The current recommended management for primary renal carcinoid tumors includes radical nephrectomy with surveillance and surgical removal of any subsequent metastases.[6] Even partial nephrectomy is recommended. The average follow-up time is 20 months with 73.1% of patients without evidence of disease after surgical treatment which suggests that surgical treatment is curative.[8],[9] Liver metastasis can be treated with open resection or with minimally invasive ablative procedures. Metastatic renal carcinoid has been noted to be resistant to chemotherapy.

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## 6. #182: THE IMPACT OF ISCHEMIA ON CHRONIC KIDNEY DISEASE PROGRESSION AFTER ROBOTIC PARTIAL NEPHRECTOMY IN PATIENTS OVER 75 YEARS OLD: RESULTS OF A MULTINSTITUTIONAL COLLABORATIVE SERIES (ROSULA)

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### Objective

Partial nephrectomy (PN) in elderly patients (over 75 years) is certainly underused with concerns regarding risk of major complications and a negligible impact on renal function. The aim of this study was to compare the progression to chronic kidney disease (CKD) of purely off-clamp vs on-clamp robotic partial nephrectomy in patients  $\geq 75$  years in a multinstitutional series.

### Materials and Methods

A collaborative multicentric minimally-invasive renal surgery dataset (ROSULA) was queried for "partial nephrectomy" and "age  $\geq 75$  years". Between May 2008 and October 2019, a total of 207 patients who underwent robotic partial nephrectomy (RAPN) matched the inclusion criteria. Newly onset of any CKD stage (3a,3b,4,5) after surgery was computed by Kaplan-Meier curve and compared for surgical approach (purely-off clamp vs on-clamp) with the log-rank test. Univariable and multivariable Cox regression analyses were performed to identify predictors of CKD progression. For all statistical analyses, a two-sided  $p < 0.05$  was considered significant.

### Results

Mean age of the cohort considered was 77 years (IQR 76-81). At a median follow-up of 25 months (IQR 12-42.2) newly onset of CKD-3a and CKD-3b stages were observed in 7.2% and 8.7% of patients, respectively. At Kaplan-Meier analysis, on-clamp approach was associated with a significantly higher risk of developing a CKD progression, while a purely-off clamp approach was associated with a significantly lower risk of renal decline in patients  $\geq 80$  years old. (Figure 1;  $p=0.04$  – Figure 2;  $p=0.03$ ). On univariable analysis surgical approach (HR 4.22 – 95% CI 1.52-11.6;  $p=0.006$ ) warm ischemia time (HR 1.05 – 95% CI 1.02-1.08;  $p=0.01$ ) and tumor size (HR 1.05 -95% CI 1.01-1.09) were all significant predictors of renal function decline. On multivariable analysis warm ischemia time (HR 1.04 – 95% CI 1.01-1.08;  $p=0.006$ ) was the only independent predictor of any CKD stage progression.

### Conclusion

Robotic partial nephrectomy in the elderly population may achieve acceptable mid-term functional outcomes. Ischemia time during robotic partial nephrectomy remains the only modifiable surgical factor to avoid a significant progression of CKD even at the oldest age.

## 7. #183: THE IMPACT OF AGE AND DIABETES ON CHRONIC KIDNEY DISEASE WORSENING AFTER PARTIAL OR RADICAL NEPHRECTOMY FOR HIGH NEPHROMETRY SCORE RENAL MASSES

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### Objective

The potential functional benefits of partial nephrectomy (PN) versus radical nephrectomy (RN) for patients with anatomically complex or large renal masses must be counterbalanced by the potential increased risks of preoperative complications. The aim of this study was to assess the impact of surgical treatment on renal functional outcomes for renal masses with RENAL nephrometry score  $\geq 9$ .

### Materials and Methods

Our institutional renal cancer dataset was queried for "radical nephrectomy", "partial nephrectomy", "RENAL score  $\geq 9$ ". Between January 2008 and October 2019, a total of 229 patients matched the inclusion criteria (134 ocRAPNs; 95 LRNs). Newly onset of any CKD stage (3a,3b,4,5) after surgery was computed by Kaplan-Meier curve and compared for surgical approach with the log-rank test. Univariable and multivariable Cox regression analyses were performed to identify predictors of CKD progression. For all statistical analyses, a two-sided  $p < 0.05$  was considered significant.

### Results

At a median follow-up of 13 months (IQR 13-25), the newly onset of CKD3a and CKD-3b,4,5 stages in the ocRAPN group were 11.9 and 6% respectively, while in the LRN group the progression to CKD-3a and CKD-3b,4,5 was 27.4%, respectively. At Kaplan-Meier analysis, LRN was associated with a significantly higher risk of CKD progression. (Figure 1;  $p \leq 0.01$ ). On multivariable analysis age (HR 1.03, 95%CI 1-1.06;  $p=0.02$ ) and RN (HR 0.17, 95%CI 0.09-0.33;  $p \leq 0.01$ ) were independent predictors of any CKD stage migration (Table 1). When including in the model  $\Delta$ eGFR at discharge,  $\Delta$ eGFR (HR 1.04, 95%CI 1-1.07;  $p=0.013$ ) and diabetes (HR 4.1, 95%CI 1.44-11.6;  $p=0.008$ ) were independent predictors of renal function deterioration (Table 2).

### Conclusion

PN confirmed to have a significant protective role on renal functional outcomes, notwithstanding, when running the analysis adjusting for  $\Delta$ eGFR, simulating a scenario when RN must be performed, diabetes was an independent predictor of CKD stage migration during follow-up. Potential impact of proper versus suboptimal medical treatment of diabetes requires further studies.

## 8. #307: 3D CLAMPLESS LAPAROSCOPIC PARTIAL NEPHRECTOMY

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### Objective

Nephron sparing surgery is now reference standard for many T1 renal tumors. Although hilar clamping creates bloodless operative field, it necessarily imposes kidney ischemic injury. "Zero ischemia" partial nephrectomy allows to eliminate ischemia during nephron sparing surgery. We report our preliminary experience of "zero ischemia" laparoscopic partial nephrectomy realized by controlled hypotension.

### Materials and Methods

Patients with a single, clinical T1 tumor were candidates for "zero ischemia" laparoscopic partial nephrectomy. High-risk patients with severe, preexisting, cardiopulmonary, cerebrovascular, or hepatorenal dysfunction were not eligible. The preoperative work-up comprised medical history, physical examination, routine laboratory tests and CT scan or MRI. A transperitoneal approach was performed in all patients; four or five laparoscopic ports are inserted. The hilar vessels are prepared in event that bulldog clamping may subsequently be needed. Intraoperative monitoring includes electrocardiogram, central venous pressure (CVP), electroencephalographic bispectral (BIS) index (BIS monitor™), NICOM (non invasive cardiac output monitoring), urinary Foley catheter. A controlled hypotension, to carefully lower the mean arterial pressure (MAP) while maintaining excellent systemic perfusion, is maintained at approximately 60 mmHg. To induce hypotension, the doses of inhalational isoflurane are increased. The renal lesion is excised using cold endoshears. Upon completion of tumor excision, blood pressure is restored to preoperative levels. Parenchyma is repaired with Vicryl™ sutures arrested with absorbable clips and Hem-O-lok™. Biologic hemostatic agents and Surgicel™ are applied to the resection bed.

### Results

101 patients affected by renal tumor underwent zero ischemia LPN. Mean age and mean BMI were 59.9 ( $\pm 11.7$ ) years and 28.0 ( $\pm 4.9$ ). ASA score was 1, 2 and 3 in 6.9%, 42.5%, 43.7% and 6.9%, respectively. Renal score was low (4-6) in 28.7%, moderate (7-9) in 61.4% and high (10-12) in 9.9% of the patients. Mean tumor size was 43.7 mm ( $\pm 15.8$ ). Operative time, blood loss,

$\Delta$ Hb were 149.6 min ( $\pm 52.4$ ), 371.2 ml ( $\pm 328.8$ ), 2.8 gr/dl ( $\pm 1.5$ ), respectively. In all cases the procedure was performed without clamping. Resection, first and second suture times were 8.3 ( $\pm 5.7$ ), 9.4 ( $\pm 6.3$ ) and 6.7 ( $\pm 2.3$ ) minutes, respectively. Hospital stay was 6.7 ( $\pm 3.9$ ) days. Postoperative complications were: 5 fever (Clavien I), 1 fever (Clavien II), 3 urine leakage managed conservatively (Clavien IIIa). Histological evaluation revealed benign lesion in 4 pts, Oncocytoma in 10 pts, AML in 4 pts, complex cyst in 1 pts, Papillary RCC in 14 pts, Chromophobe RCC in 5 pts, clear cell RCC in 47 pts [pT1a (31 pts), pT1b (25 pts), T2 (2 pts), T3a (7 pts)]. Preoperative and postoperative serum Creatinine was  $0.8 \pm 0.24$  and  $0.9 \pm 0.22$ , respectively ( $\Delta 0.05 \pm 0.08$ ;  $\Delta\%$  -6.2); Preoperative and postoperative GFR was  $96.43 \pm 33.03$  and  $88.03 \pm 26.35$ , respectively ( $\Delta -8.41 \pm 12.97$   $\Delta\%$  -8.7).

#### Discussions

Nephron sparing surgery is now reference standard for many T1 renal tumors. Although hilar clamping creates bloodless operative field, it necessarily imposes kidney ischemic injury. "Zero ischemia" partial nephrectomy allows to eliminate ischemia during nephron sparing surgery.

#### Conclusion

Zero ischemia LPN represents a safe and reproducible technique that allow to sparing renal parenchyma and preserve renal function. However long-term results are needed.

## 9. #306: SURGICAL OUTCOMES AND PERIOPERATIVE MORBIDITY OF CLAMP VS OFF-CLAMP LAPAROSCOPIC PARTIAL NEPHRECTOMY

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#### Objective

Nephron sparing surgery (NSS) is now reference standard for many T1 renal tumors. To reduce renal damage several technique have been proposed; cold ischemia, artery clamping, selective artery clamping, zero ischemia. We retrospectively compared perioperative results of clamp vs no clamp procedure in patients affected by T1 renal cancer.

#### Materials and Methods

From database of our institution we reviewed patients affected by single, clinical T1 tumor who underwent a laparoscopic partial nephrectomy (LPN). A transperitoneal approach was performed in all patients. In Clamp LPN group renal artery was clamped using laparoscopic Bull dog. In off-clamp group, a controlled hypotension, to carefully lower the mean arterial pressure (MAP) while maintaining excellent systemic perfusion, was maintained at approximately 60 mmHg. To induce hypotension, the doses of inhalational isoflurane was increased. The renal lesion was excised using cold endoshears. Parenchyma was repaired with Vicryl™ sutures arrested with absorbable clips and Hem-O-lok™. In clamp group bulldog was removed while in the off-clamp group blood pressure was restored to preoperative levels. Biologic hemostatic agents and Surgicel™ were applied to the resection bed when appropriated.

#### Results

We identified 65 patients in the clamp group and 101 in off-clamp group; baseline characteristic of the two groups are described in table 1. Patients of off clamp group presented significant less operative time, blood loss and transfusion rate than clamp group. Hospitalization and suture time were shorter for off-clamp group, also [table 2]. No significant differences were observed in terms of histological evaluation [table 3]. Postoperative complication were rare [table 4].

#### Discussions

Nephron sparing surgery (NSS) is now reference standard for many T1 renal tumors. To reduce renal damage several technique have been proposed; cold ischemia, artery clamping, selective artery clamping, zero ischemia.

#### Conclusion

Clamp and off-clamp laparoscopic partial nephrectomy are equally safe and reproducible technique in terms of perioperative outcomes and complications. However the appropriate procedure should be selected taking into account tumor complexity, patient comorbidity and surgeon experience

## 10. #144: CLAMP-LESS PARTIAL ROBOTIC NEPHRECTOMY (RPN): SURGICAL FEASIBILITY, PERCENTAGE OF POSITIVE MARGINS AND INTRA- AND POST-OPERATIVE COMPLICATIONS

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#### Objective

Robotic partial nephrectomy (RPN) has emerged as an attractive minimally invasive nephron-sparing surgical option. However, on-going concerns about RPN include: prolonged ischaemia time with potential implications on renal functional outcomes(1-2). We detail the technique and present perioperative outcomes of our technique of zero-ischaemia RPN for renal tumours (Clamp-less Robotic surgery)(3).

## Materials and Methods

From January 2011 to September 2019 181 patients underwent PN Clamp-Less Robotic Assisted Care. RPN was offered to all patients with even partially exotic lesions, regardless of renal-vascular anatomy, contralateral kidney characteristics or renal function. 5/181 had dual unilateral tumours. 7/181 had monorene. The mean diameter of the neoplasms was 3.9 cm (2.5 – 5.5 cm), the lesions were localized: 101 right kidney, 80 left kidney, 47 upper polar, 53 middle, 80 lower. The operating technique involved the use of 3 robotic doors (camera + scissors and Prograsp) + 1 accessory door. After isolation of the kidney and the lesion, hot enucle/tumorectomy was performed with subsequent diathermocoagulation of the enucleoreseztine bed with positioning of fibrin glue and haemostatic material

## Results

The RPN Zero-ischemia has been successful in all cases without the need for hilar clamping. The size of the median tumor (range) was 3.9 (2.5-5.5) cm. The time of warm ischemia was zero in all cases. The mean operating time was 60 (45-100) min, the estimated blood loss was 120 (50-300) ml. The average hospital stay was 4 (3-6) days. There were no intraoperative complications; 4/181 (0.02%) patients presented a post-operative haemorrhage that required a decisive laparotomy. None of the 4 patients had bleeding from the resection margins. 2 patients was bleeding from kidney fat and 2 from a robotic port. All tumour samples had negative surgical margins. The absolute median decrease in serum creatinine and the estimated glomerular filtration rate at discharge were 0 (0.2-0.7) mg / dL (P = 0.4) and 5 (-16-29) mL / min for 1.73 m (2) (P = 0.8), respectively.

## Discussions

Zero-ischemic RPN for kidney cancer is safe and feasible. The elimination of hot ischemia can optimally preserve renal function.

## Conclusion

Randomized prospective studies are required to confirm any renal functional advantages of RPN without clamping.

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## 11. #156: A SINGLE INSTITUTE RETROSPECTIVE ANALYSIS BETWEEN LAPAROSCOPIC PARTIAL NEPHRECTOMY AND OPEN PARTIAL NEPHRECTOMY FOR THE TREATMENT OF HIGHLY COMPLEX RENAL TUMORS WITH PADUA SCORE $\geq 10$

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## Objective

Partial nephrectomy(PN) is considered the standard of care in patients with T1 tumours for whom a PN is feasible by any approach, including open (1). PN achieves equivalent oncological outcomes with those of radical nephrectomy(RN) also in patient with RCC  $\geq 4$ cm (2). The indications for (nephron sparing surgery) NSS are expanding with the use of minimal invasive techniques. Studies comparing laparoscopic and open PN found no difference in PFS and OS in centers with laparoscopic expertise (3). Anatomical classification systems, such as the PADUA score, help the surgeon to evaluate the complexity of the tumor. We considered complex renal tumors as Preoperative Aspects and Dimensions Used for an anatomical (PADUA)  $\geq 10$  (4). We report our experience in conservative treatment of highly complex renal tumors with PADUA score  $\geq 10$ .

## Materials and Methods

We retrospectively evaluated all the patients treated in our department from January 2015 to September 2019. All procedures were performed by a single surgical team. 21 patient underwent an open partial nephrectomy (OPN) (Group A) and 72 underwent a laparoscopic partial nephrectomy (LPN) (Group B). All OPN were performed with a retroperitoneal approach and all LPN were performed with a transperitoneal approach. Postoperative complications have been classified according to the Clavien-Dindo system. Only the complications with a score  $\geq 3$  were considered in the analyses. Mean values with standard deviations( $\pm$ SD) were computed and reported for all items. Statistical significance was achieved if p-value was  $\leq 0.05$ (two-sides). Statistical analyses were conducted using SAS version 9.3 software(SAS Institute, Inc., NC)

## Conclusion

LPN represents a feasible and safe procedure for renal tumours of a high surgical complexity if performed in highly experienced laparoscopic centres. The procedure offers good intraoperative outcomes and a low rate of post-operative complications.

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# Video 3 - Chirurgia Prostatica "High Level"

## 1. #176: RETROSPECTIVE COMPARISON OF PERIOPERATIVE AND 1-YR SELF-REPORTED FUNCTIONAL OUTCOMES BETWEEN MILLIN, FREYER AND MADIGAN ROBOT ASSISTED SIMPLE PROSTATECTOMY: SINGLE CENTER SERIES

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The video shows our surgical techniques for three different approaches of RASP: Freyer, Millin and Madigan. Standardized indications to the available techniques were: bladder diverticula or stones and/or large median lobe for Freyer technique, patients' desire to preserve antegrade ejaculation in absence of any of the above mentioned criteria for Madigan procedure, Millin procedure in all other cases. Baseline and one-yr functional outcomes assessed by means of self-reported validated questionnaires (IPSS, IIEF, ICIQ short form, MSHQ Short Form) were analyzed. Categorical and continuous variables were compared with chi square and Student t test, respectively.

## 2. #269: LAPAROSCOPIC SIMPLE PROSTATECTOMY: TECHNICAL ASPECTS

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A consecutive series of men with lower urinary tract symptoms and large prostates (>80cc) prospectively enrolled between November 2015 and December 2017 in one center. All patients underwent laparoscopic simple prostatectomy. Outcomes were evaluated considering the trifecta favourable outcome which was defined as a combination of the following items: (1) no perioperative complications, (2) postoperative IPSS 15 ml/s. Complications were evaluated according to the modified Clavien classification system. Univariate and multivariate binary logistic regression was performed to identify predictors of a positive Overall 272 patients were enrolled. At three months after surgery median IPSS total score was 4 (IQR:3/7), median IPSS QoL was 1 (IQR:1/2), median PSA was 0.53 (IQR:0.33/1.00) ng/ml and median Qmax was 23 (17/30) ml/s. All these parameters improved statistically when compared to baseline ( $p < 0.001$ ). The overall complication rate was 21 % however most of the complications were low grade complications according to modified Clavien Dindo classification (Grade  $\leq 2$ ). Overall, 68% of the patients presented a positive trifecta outcome. On multivariate analysis only preoperative Haemoglobin and hospital stay were confirmed predictors of positive trifecta outcome. LSP represents a safe and effective procedure in the treatment of large adenomas.

## 3. #277: BIPOLAR PLASMA TURP OF PROSTATE OF 150 ML: THE WHITE RESECTION

Alessandro Marano<sup>1</sup>, Michele Bottalico<sup>1</sup>, Fabrizio Palumbo<sup>1</sup>, Stefano Vittorio Impedovo<sup>1</sup>, Michele Erinnio<sup>1</sup>, Gabriele Alberto Saracino<sup>1</sup>, Vito Domenico Ricapito<sup>1</sup>

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The video shows the synthesis of a 70 minutes TURP of a prostate with a volume of 150 ml performed using the bipolar plasma edge technology by Lamidey. TURP remains the gold standard and it is strongly recommended for the treatment of moderate-to-severe LUTS men with prostate size of 30-80 mL. Oversized prostates > 80-100 mL undergo to traditional open prostatectomy or to laser enucleation. The TURP shown is one of a group of 7 patients with prostate larger than 100 ml and up to 180 ml treated by bipolar plasma TURP since November 2018. The approach for those oversized prostate was posterior to remove first the large medium lobe. For the lateral lobes a tunnel between the lobe and the prostate capsule was made to allow a faster and less bleeding resection of each lobe from the lateral to the median part. Average operative time was 71 minutes (range 55-90); mean hospitalization time was 3.3 days (range 2-4); no patient had TUR syndrome; none required blood transfusion or iron intravenous implementation; no other adverse event were registered. The use of saline solution and the short operative time allow the procedure to be safe also for large size prostate. Larger studies are mandatory to confirm our results.

#### 4. #139: LAPAROSCOPIC RADICAL PROSTATECTOMY AFTER PREVIOUS OPEN RETROPUBIC PROSTATIC ADENOMECTOMY

Paolo Parma<sup>1</sup>, Mattia Nidini<sup>1</sup>, Alessandro Samuelli<sup>1</sup>, Livio Cappellaro<sup>1</sup>, Vincenzo Galletta<sup>1</sup>, Stefano Guatelli<sup>1</sup>, Francesco Croce<sup>1</sup>, Elisabetta Deluise<sup>1</sup>, Luciano Marco<sup>1</sup>, Bruno Dall'Oglio<sup>1</sup>

<sup>1</sup> Ospedale Carlo Poma Mantova (Mantova)

This video presents a successfully performed LRP after previous open retropubic adenomectomy. A 70-years-old patient was submitted to open retropubic adenomectomy of the prostate in 2009. The PSA was 6.4 ng/ml, the histologic examination of the biopsies revealed a prostatic adenocarcinoma Gleason 7 (4+3) at the apex of the left lobe and at the base of the right lobe. The patient was submitted to transperitoneal laparoscopic radical prostatectomy with extended pelvic lymphadenectomy. We began the laparoscopic surgery performing a difficult blunt dissection between the anterior bladder wall and the abdominal wall. The anterior face of the prostate is not visible due to the adhesions of the prostate with the pubis caused by the previous surgery. The isolation of the bladder neck after open retropubic adenomectomy is difficult as the bladder neck is wide and the ureteral orifices could be very close to it. The presence of fibrous tissue made difficult the development of the posterior plane of the vas deferens and seminal vesicles. Section of prostatic vascular pedicles without nerve sparing technique. Section of the prostatic apex and the urethra with adequate length of the urethral stump. The urethral vesical anastomosis was performed with a single 3-0 double needle barbed suture 35 cm length with posterior reconstruction.



# Comunicazioni 5 - Carcinoma Prostatico: Diagnosi e Terapia

## 1. #147: ADAR1 IS HIGHLY EXPRESSED IN PRIMARY PROSTATE CANCER AND CORRELATED WITH CD8+ T-LYMPHOCYTES DENSITY

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### Objective

It is now recognized that the evolution of cancer cells is dependent by genetic or epigenetic alterations. However, this concept has recently been challenged by another mode of nucleotide alteration, RNA editing, which is frequently upregulated in cancer(1) RNA editing is a biochemical process in which either Adenosine or Cytosine is deaminated by a group of RNA editing enzymes including ADAR (Adenosine deaminase; RNA specific) The result of RNA editing is usually adenosine to inosine (A-to-I) or cytidine to uridine (C-to-U) transition, which can affect protein coding, RNA stability, splicing and microRNA-target interactions(2). The aim of this study was to preliminarily investigate the expression of ADAR1 in a series of prostate cancer specimens and benign prostatic hyperplasia (BPH) following transurethral resection of the prostate (TURP).

### Materials and Methods

Sixty prostate specimens were investigated. Fifty specimens were diagnosed as prostate carcinoma and 15 as benign prostate hyperplasia. The samples were fixed in 10% formaldehyde and paraffin-embedded. Two-micrometer thick sections were cut and processed for immunohistochemistry with primary antibodies raised against ADAR1 (SantaCruz Biotechnology, Dallas, TX, USA) or CD8+ T-lymphocytes (Dako, Milan, Italy). 3,3'-Diaminobenzidine tetrahydrochloride was used as a chromogen to yield brown reaction products. To quantify the surface covered by infiltrating CTLs each histological section was digitized using an automated image analysis system with incorporated ad hoc constructed image analysis software. The system automatically selected the surface covered by the CTL on the basis of red, green and blue (RGB) color segmentation.

### Results

ADAR1 up-regulation was heterogeneously detected in a high percentage of prostate cancer tissues, but to a much lesser extent in adjacent non-malignant tissues or tissue affected by BPH (p < 0.001). Prostate cancers with high ADAR1 expression exhibited high tumor-infiltrating CD8+ T lymphocyte. ADAR expression is associated with several diseases including cancer, neurological disorders, metabolic diseases, viral infections, and autoimmune disorders

### Discussions

This study first shows that ADAR1 is highly expressed in a high percentage of prostate cancer tissues, but to a much lesser extent in adjacent non-malignant tissues or tissue affected by benign prostatic hyperplasia. Additionally, prostate cancers with high ADAR1 expression exhibited high tumor-infiltrating CD8+ T lymphocyte

### Conclusion

Our findings indicated that ADAR1 might play an important role in the occurrence, progression, and prognosis of prostate cancer, and open new ways for the development of new and more effective immunological therapeutic strategies.

### Reference

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## 2. #169: HIGHLY-TRAINED DOGS' OLFACTORY SYSTEM DON'T DISCRIMINATE LOW AND HIGH RISK PROSTATE CANCER IN URINE SAMPLES

Highly-Trained Dogs' Olfactory System don't discriminate low and high risk prostate cancer in urine samples

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### Objective

To establish the diagnostic accuracy, in term of sensitivity and specificity at which a rigorously trained canine olfactory system can discriminate High Risk Prostate Cancer (HPC) versus Low Risk Prostate Cancer (LPC) specific volatile organic compounds (VOCs) in urine samples(1-2-3).

### Materials and Methods

Two female and one male German Shepherd Explosive Detection Dogs were trained to identify HPC-specific VOCs in urine samples and tested on 550 subjects (165 with HPC vs 385 with LPC. This cross sectional design for diagnostic accuracy involved Humanitas Mater Domini and the Italian Ministry of Defense's, Military Veterinary Center.

### Results

The dogs achieved the following performances: Dog 1 achieved a sensitivity of 1% and specificity of 0,7% Dog 2 achieved a sensitivity of 0,2% and specificity of 0,1% Dog3 achieved a sensitivity of 0,1% and specificity of 0,7%

### Discussions

A trained canine olfactory system don't discriminate between HPC and LPC

### Conclusion

Evidently, for Highly-Trained Dogs' Olfactory System, high risk cases do not differ in terms of VOCs compared to LPC. Apparently, the VOCs metabolism is the same for HPC and LPC.

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## 3. #267: IXIP FOR THE PREDICTION OF PROSTATE CANCER

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### Objective

iXip has been recently introduced for the prediction of prostate cancer. The aim of our study was to analyze the performance iXip for the prediction of prostate cancer patients undergoing prostate biopsies.

### Materials and Methods

A consecutive series of men undergoing prostate biopsies were enrolled in two centers. Indications for prostate biopsy included abnormal Prostate specific antigen levels (PSA>4ng/ml) and/or abnormal DRE. Demographic and clinical characteristics of the patients were recorded. All patients underwent iXip test before prostate biopsy. Prostate biopsy was performed transperineally and all patients underwent 12 core biopsy. Performance of Xip was analyzed using receiver operator characteristics curve (ROC curve).

### Results

Overall 60 patients with a median age of 65 (59/72) years were enrolled. Median PSA was 6.8 (4.8/10.0) ng/ml and median prostate volume was 48 (35/68) ml. Overall median iXip was 0,33 (0,28-0,51). 35/60 patients based on iXip levels (<0,5), PSA levels and MRI data after discussion with the patient were scheduled for a 6 months control because of low suspicion of cancer. Overall 11/25 (44%) presented PCa and out of them 7/11 (63%) presented a prostate cancer. The test presented an AUC of 0,71 (0,50-0,91, p=0,045) for the prediction of prostate cancer while PSA presented an AUC of 0,60 (0,37-0,83).

### Conclusion

In our experience the use of iXip may help clinicians in the diagnostic pathway of prostate cancer avoiding unnecessary biopsies. Although the numbers are small the accuracy of iXip outstands PSA one.

#### 4. #168: SERPINB3: A NOVEL HISTOPATHOLOGICAL BIOMARKER OF PROSTATE CANCER AGGRESSIVENESS

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##### Objective

SERPINB3, also known as Squamous Cell Carcinoma Antigen-1 or SCCA1 is a member of the family of serine-protease inhibitors(1). SERPINB3 protects cells from oxidative stress conditions, but in chronic damage this serpin may lead to cancerous lesions through different strategies, including inhibition of apoptosis, induction of epithelial to mesenchymal transition and decrease of desmosomal junctions, cell proliferation and invasiveness(2). The aim of the present study was to investigate the protein expression of SERPINB3 in a series of prostate cancer specimens and benign prostatic hyperplasia (BPH) following transurethral resection of the prostate (TURP).

##### Materials and Methods

Sixty prostate specimens were investigated. Fifty specimens were diagnosed as prostate carcinoma and 15 as benign prostate hyperplasia. The samples were fixed in 10% formaldehyde and paraffin-embedded. Two-micrometer thick sections were cut and processed for immunohistochemistry with primary antibodies raised against SERPINB3 (Proteintech, Rosemont, IL, USA). This was followed by 30 min incubation with the Envision system (Dako). 3,3'-Diaminobenzidine tetrahydrochloride was used as a chromogen to yield brown reaction products.

##### Results

SERPINB3 expression was detected in a high percentage of prostate cancer tissues (80%), but to a much lesser extent in adjacent non-malignant tissues (20%) or tissue affected by benign prostatic hyperplasia ( $p < 0.001$ ). High levels of SERPINB3 expression were found in advanced prostate tissue specimens.

##### Discussions

These results suggest that SERPINB3 may be a potential prognostic marker for prostate cancer

##### Conclusion

The down-regulation of SERPINB3 may be a therapeutic target in the suppression of prostate cancer growth.

##### Reference

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#### 5. #214: DIAGNOSTIC ACCURACY OF 68GA-PSMAHBED PET/CT AND PELVIC MP-3TESLA MRI IN PRIMARY STAGING OF PATIENTS WITH INTERMEDIATE/HIGH-RISK PROSTATE ADENOCARCINOMA

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##### Objective

To evaluate the diagnostic accuracy of whole-body 68Ga-PSMAHBED PET/CT (PSMA PET) and pelvic multi-parametric 3TeslaMRI (mpMRI) in primary staging of patients with intermediate/high-risk prostate adenocarcinoma (PCa).

##### Materials and Methods

We prospectively enrolled 13 patients (age range: 49-72 years; median: 61 years) with biopsy-proven PCa (ISUP: 1 to 4; PSA range: 2.2-28.3ng/ml; biopsy T: T2a-T2c) scheduled for radical prostatectomy. PSMA PET-CT and mpMRI were performed within six weeks prior to surgery and independently reported. Concordance between PSMA PET and mpMRI findings was assessed. A rigid co-registration of PSMA PET to T2-weighted MRI reporting all suspected PCa lesions onto the 12-segment prostate map was carried out. Post-prostatectomy pathology was the standard of truth for T and N staging; abdomen CT and bone scan for M staging.

##### Results

Pathologic prostate findings were documented in all 13 patients on mp-MRI and in 12 patients on PSMA PET. PCa tumour laterality (bilateral in 12 cases; monolateral in 1 case) was correctly identified in nine patients by PSMA PET and in 10 patients

by mpMRI. On a 12-prostate segment basis PSMA PET and mpMRI results were concordant in 115/156 segments (73.7%) being both positive for PCa in 30 segments and both negative for PCa in 85 segments. Concordant positive findings on PSMA PET and mpMRI resulted true positive (TP) on pathology in 80% (24/30 segments); concordant negative findings on both PSMA PET and mpMRI resulted true negative (TN) on pathology in 68% (58/85 segments). Discordant results were observed in 41 segments. Of these, 19 segments were positive on PSMA PET only (10 TP; 9 false positives); 22 segments were positive on mpMRI only (18 TP, 4 false positives). All patients resulted negative for nodal metastases on PSMA PET and mpMRI. Pelvic node dissection confirmed the N0 status. No distant metastases were demonstrated on PSMA PET and on pelvic mpMRI, nor suspicious lesions were documented on clinical bone scans and abdomen CTs. Tumours with ISUP 1, ISUP 2, ISUP 3 and ISUP 4 had a median SUVmax of 5.1, 10.3, 4.1 and 15.0, respectively. Median PCa SUVmax was 4.6 and 4.3 in patients with PSA starter 10ng/ml, respectively.

#### Conclusion

Our preliminary results suggest that PSMA PET might have a role in PCA pre-operative staging. Obviously a larger number of patients is needed to understand the accuracy of PSMA PET compared to mpMRI.

#### Reference

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## 6. #206: MAGNETIC RESONANCE-TARGETED COGNITIVE BIOPSY VERSUS FUSION BIOPSY TRANSRECTAL ULTRASOUND GUIDED

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#### Objective

The exact role of multiparametric magnetic resonance (mpMR)-targeted biopsy (TB) of the prostate before diagnosis is under examination. The balance between costs and advantage is controverser. To analyze if, after first traditional negative biopsy, multiparametric magnetic resonance (MR)-targeted biopsy (TB) could be better of fusion biopsy we compare biopsy performance of the two approaches. Multiparametric magnetic resonance (MR)-cognitive targeted biopsy (CTB) with that of fusion biopsy (FB) detection of prostate cancer (PCa).

#### Materials and Methods

360 patients (Jan 2016 June 2019), with a previous negative biopsy 12 Core with informed consent who were suspected of having PCa underwent mpMR, we chose only patients with Pirads 4 and 5 suspicious abnormality (target) at pre-biopsy. 180 Patients underwent 12-core CTB with transrectal ultrasonographic (US) guidance, with four cores aimed visually (cognitive TB [TB-COG]) and 180 patients underwent four cores aimed using transrectal US-MR fusion software (fusion-guided TB [TB-FUS]). FB and TB positivity for cancer and sampling quality (mean longest core cancer length, Gleason score) were compared. Clinically significant PCa was any 3 mm or greater core cancer length or any greater than 3 Gleason pattern for SB or any cancer length for TB. Statistical analysis included t test, paired  $\chi^2$  test, and  $\kappa$  statistic. Primary end point (core cancer length) was calculated (paired t test).

#### Results

Among 360 patients (median age, 65 years; mean prostate-specific antigen level, 7.5 ng/mL, positivity rate for PCa was 59% for SB and 69% for TB ( $P = .033$ ); rate for clinically significant PCa was 52% for SB and 67% for TB ( $P = .0011$ ). Mean longest core cancer lengths were 4.6 mm for SB and 7.3 mm for TB ( $P \leq .0001$ ). In 12 of 51 (24%) MR imaging targets with positive SB and TB results, TB led to Gleason score upgrading. In MR imaging targets, positivity for cancer was 47% with TB-COG and 53% ( $n = 42$ ) with TB-FUS ( $P = .16$ ). Neither technique was superior for Gleason score assessment.

#### Discussions

Only a few studies have compared the detection rates of PCa between different targeting techniques. We compared CTB and MRGB in two statistical similar patient groups and found nearly similar detection rates of PCa for CTB and MRGB related to PI-RADS score and lesion location. However, correction shows that in lesions  $\leq 1.5$  ml MRGB is more accurate. Other studies concern mainly a comparison of CTB with MRI/TRUS-fusion biopsy (MTFGB) and the results are controversial. (1-5) This study represents the true clinical setting, but has some limitations due to its retrospective design. Though significant tumors ought to be detected within this period, a longer follow-up period could stronger endorse these study conclusions. However, despite these limitations, due to the comparability of both groups we believe the results of this study are very useful in clinical practice.

#### Conclusion

Three methods of fusing MRI for targeted biopsy have been recently described: MRI-ultrasound fusion, MRI-MRI fusion

('in-bore' biopsy) and cognitive fusion. Supportive data are emerging for the fusion devices. Working with the Toshiba device, we found that targeted biopsies are two to three times more sensitive for detection of CaP than nontargeted systematic biopsies; nearly 40% of men with Gleason score of at least 7 CaP are diagnosed only by targeted biopsy; nearly 90% of men with highly suspicious MRI lesions are diagnosed with CaP; ability to return to a prior biopsy site is highly accurate (within  $1.2 \pm 1.1$  mm); and targeted and systematic biopsies are twice as accurate as systematic biopsies alone in predicting whole-organ disease.

#### Reference

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## 7. #304: THE ROLE OF MULTIPARAMETRIC RESONANCE AND FUSION BIOPSY IN PROSTATE CANCER DETECTION: THE "NEW ERA" OF MINIMALLY INVASIVE APPROACH WITH HIGH DIAGNOSTIC ACCURACY COMPARED WITH DEFINITIVE HISTOPATHOLOGICAL SPECIMEN AFTER LAPAROSCOPIC/ROBOTIC RADICAL PROSTATECTOMY

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#### Objective

The diagnosis of PCa is determined by histopathology of the biopsy taken in case of clinical suspicion, high PSA level and abnormal digital rectal examination (DRE). The current standard technique for PCa detection is transrectal and trans perineal ultrasound-guided biopsy (TRUS-GB/ TRUS-TP) and many strategies for prostate biopsy have been described, but the gold standard remains to be the 10-12 core format under transrectal ultrasound (TRUS) guidance. Developments of multiparametric MRI (mpMRI) techniques have increased the sensitivity of imaging for PCa<sup>8</sup>. Clinical guidelines advise performing an mpMRI when initial TRUS biopsy results are negative but the suspicion of PCa persists<sup>9</sup>. Usage of a 3 Tesla (3-T) magnet has further enhanced resolution and quality of imaging compared with 1.5-T<sup>10</sup>. The Prostate Imaging-Reporting and Data System (PI-RADS) classification was introduced in 2012 by the ESUR, and has recently been updated to version 2.0. The aim of the study is to evaluate the diagnostic accuracy of mpMRI side of lesion and MRI/US fusion biopsy compared to final histopathologic after the radical prostatectomy. The main endpoint is to evaluate the correlation between mpMRI suspicious area, fusion/standard biopsy and histopathological definite specimens after radical prostatectomy.

#### Materials and Methods

We collected data about 65 patients with suspicious PCa undergoing targeted Biopsy prostatic transrectal Fusion from March 2018 to September 2019 at the Hospital Pederzoli, Peschiera del Garda (Vr) Italy. We analyzed the following information:

- Anagraphical: age, informed consent
- PSA before the mpMRI
- Urological examination: DRE
- Prostate volume at MRI (ml)
- Number of previous biopsies
- mpMRI: PIRADS score, lesion(s) position(s)
- Histological examination of the prostate biopsies: number of cores, Gleason score or ASAP, total involvement by cancer and the side of positive core (right or left sides).
- Definitive histopathological examination on the surgical specimen: T stage and localization. The correspondence between Gleason score at the fusion and/or random biopsy and at the definitive examination was assessed.

We created an excel database (named DB FUSION PEDERZOLI) and used the same sheet for collecting the data of patients who underwent radical prostatectomy after positive biopsy. All statistical analyses were conducted using SPSS software (version 25, SPSS Inc., Chicago, IL). Chi-square tests were used to calculate the relations between respectively: laterality of target lesion at MRI and at biopsy; laterality of target lesion at MRI and at definitive histologic report; laterality at biopsy and definitive histologic report; laterality of biopsy and definitive histologic report; PIRADS score and definitive histologic report; Gleason score at biopsy and definitive histologic report; PIRADS score and Gleason score at biopsy. Relation between variables was considered significant for  $p < 0.05$ . All results were also reported as bar charts. All data were analyzed with chi square test and were statistically significant with  $p < 0.05$ .

1. Multiparametric magnetic resonance (mpMRI) and type of machine. We used a Ultrasound Hitachi Arietta V70 and Stereotactic Navigated Biopsy Biopsee for fusion of MRI. All patients underwent MP-MRI on a 1.5-T and 3.0-T MRI. Prior to biopsy, an MP-MRI

was interpreted by the radiologists; the images were segmented, and lesion locations were recorded. Patients with lesions identified on MP-MRI underwent a targeted biopsy performed by one operator. All biopsies were carried out at the Urology Clinic –Pederzoli Hospital following a standardized protocol. T2-weighted axial, sagittal and coronal sequences of the mpMRI were uploaded into a MRI/US fusion device (Hitachi Arietta v70 with integrated real-time ultrasonography) and the suspicious lesions were marked in the 3 planes using the RVS software. The targeted biopsy was performed with the previously identified MP-MRI lesions overlap using the T2-weighted sequence on the real-time TRUS images. Each lesion was sampled both in axial and sagittal planes by an Bi-Convex TRUS probe (Fig.8-9-10). The standard biopsy was typically 16 cores collected in an extended-sextant template of biopsies from the lateral and medial aspects of the base, mid, and apical prostate on the left and right side<sup>14</sup>.

#### Results

A total of 60 patients underwent mpMRI fusion biopsy and radical prostatectomy during the study period. 65% patients with suspicious area on the right side on mpMRI had a concordance with the positive core biopsy. In the 70% of cases with suspicious area on the left side, had a concordance with the positive core biopsy: in patients with bilateral lesions on mpMRI there were a concordance of 100% with the positive core biopsy ( $p < 0.000$ ). However, mpMRI missing respectively 35% and 30% cases of bilateral cancer, confirmed at biopsy cores but described as unilateral on mpMRI. The laterality to the definitive histology was confirmed in 50% of the patients who showed a right laterality to prostatic biopsy and in 35.7% of the patients who showed a left laterality to the prostatic biopsy. Furthermore, the concordance is 100% in patients who showed the presence of suspected bilaterally lesions ( $p = 0.015$ ). PIRADS score 5 was associated with a total GS of 7 in 53.3%, while in 26.7% of cases was 8 and only in 10% of cases was  $\geq 7$ . Moreover in another 10% of cases was negative or associated with ASAP ( $p = 0.015$ ).

#### Discussions

MpMRI is increasingly used as a tool to improve the diagnostic pathway for prostate cancer. Recently more studies have provided evidence to support a large use of mpMRI, the detection and characterization of PCa is more accurate when the lesion was previously identified using mpMRI specially in biopsy-naïve patients, thus reducing the number of unnecessary biopsies. PRECISION trial randomized biopsy-naïve patients with clinical suspicion of PCa to undergo mpMRI followed or not by target biopsy or upfront standard biopsy. In this study, despite an improved detection rate with mpMRI and fusion biopsy, there is a small number of patients in whom negative target biopsy was revealed to be a false negative on saturation biopsy or showed upgrade at saturation biopsy when compared to target biopsy<sup>19</sup>. PROMIS study proposed the use of mpMRI as a 'triage' test, therefore avoiding prostate biopsy in 27% of the patients and the diagnosis of non-CSPCa clinically-significant PCa in 5%. However, any mpMRI suspicious lesion needs to be confirmed by biopsy prior to any further therapeutic decision<sup>20</sup>. Another study by Siddiqui et al. showed that target biopsy is able to detect PCa with a higher GS compared to standard biopsy or to upgrade the GS of a cancer already detected at standard biopsy<sup>15</sup>. This study has led a fraction of patients with CSPCa is still missed by target biopsy, in fact Muthigi et al<sup>16</sup> hypothesized four different mechanisms explaining why a CSPCa could be missed or downgraded at target biopsy; Failing to identify the lesion at a first exam with detection in a second exam, failing to identify a suspicious area at mpMRI, failing to biopsy accurately the lesion detected at mpMRI for technical problem during registration, heterogeneity of the intralesional Gleason score. This can be true especially for large tumors where a larger intralesional heterogeneity can be expected; target sampling and random sampling could therefore give a different representation of the various grading areas present in the same tumor<sup>17</sup>. From the result of the study, we learned that the Fusion biopsy is a complex procedure influenced by various factors, experience of the operator, contouring of prostate in first step of procedure, by the eye-hand coordination of the operator during navigation, the adjustment of the image coupling in case of patient's movement or deformation of the prostate during the procedure. We show target and standard saturation biopsy are complementary in the diagnosis of PCa in setting of biopsy-naïve patient. In this moment the guidelines do not support the execution of exclusively target biopsies because the risk of missing a CSPCa and our experience support this idea. In case of patients with previous negative biopsy the fusion technique improves the diagnostic accuracy of standard biopsy, with similar result of patients under Active surveillance. Several different studies have evaluated the ability of mpMRI to detect CSPCa comparing the imaging results with the definitive histopathology at RP. A work by Turkbey et al<sup>18</sup> aimed to evaluate the detection rate of cancer for 3T mpMRI, with sensitivity and specificity evaluate the influence of tumor volume and GS on the sensitivity of mpMRI. The results showed that mpMRI was more sensitive in cancers  $\geq 5$  mm and GS  $\geq 7$ , thus confirming the adequacy of the imaging study for CSPCa detection. Moreover, the correlation analysis between mpMRI, fusion biopsy and GS at RP histopathology represents a further tool for evaluating the diagnostic accuracy of mpMRI. A study by Siddiqui et al<sup>14</sup> showed that target biopsy significantly improved the prediction of Gleason grade and risk group at definitive RP pathology. Of 170 included patients, 17 were positive at standard.

#### LIMITATIONS

The main limitation of the present study is the reduced number of patients in each subgroup. Therefore, the observations drawn from the analysis do not have statistical significance and should be regarded as trends rather than as conclusions. Another possible limitation could be seen in the fact that not all the mpMRI were carried out in our hospital: 145/267 patients of the general database and 60 in the RP subgroup. To overcome this limitation, all the external scans were assessed for quality (and, if minimal standard not met, excluded from the analysis) and reviewed by dedicated uro-radiologists. Another problem in studies dealing with fusion biopsy is how to define CSPCa: in the absence of an universally-supported definition, the comparison between different studies is very difficult. Finally, another technical limitation is the difference between the maps used by the radiologist and the pathologist for reporting. The 39 regions sector map provided PIRADSv2 and used by the radiologist did not show concordance with the macro-sections used by the pathologists and there is a risk for mismatch when comparing the position of lesions in mpMRI and pathology. In the future this will need to be improved through the use of a shared map allowing radiologist and pathologist to speak the same language.

#### Conclusion

Regarding the ability of mpMRI-targeted sampling to identify cancer compared to random biopsy according to the current

literature show improve on detection rate of PCa. Our analysis showed that the most frequent PCa patients have bilateral tumors, despite resonance and biopsy report homolateral lesions. Data suggest the existence of a positive correlation among PIRADS score at mpMRI and Gleason score at definitive histological examination. The multidisciplinary approach with radiologist and urologist is important to obtain an analysis very close to reality.

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## 8. #163: PHYSICAL ACTIVITY DECREASES THE RISK OF CANCER PROGRESSION IN PATIENTS ON ACTIVE SURVEILLANCE: A MULTICENTER RETROSPECTIVE STUDY

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#### Objective

Active surveillance (AS) is a viable and recommended option for men diagnosed with low-risk (LR) prostate cancer (PCa). However, a non-negligible share of them will receive radical treatments within 10 years due to disease progression. Exercise has been shown to delay PCa upgrading/upstaging in animal models but its role in humans remains unclear. In the present study, we assessed the effect of physical activity on disease progression in a cohort of patients on AS.

#### Materials and Methods

Two participating institutions shared data from their prospectively maintained AS databases in the context of the PRIAS (Prostate Cancer Research International Active Surveillance) protocol. Baseline demographic, anthropometric, clinical and pathologic data were collected. All patients had no more than 2 Gleason score 6 positive cores at biopsy, baseline PSA <10 ng/mL and PSA density <0.2. A validated PASE (Physical Activity Scale for the Elderly) score was provided to patients for a self-assessment of physical activity. Sedentary lifestyle was accordingly stratified into three classes: mild (PASE ≥ 120), moderate (45120), severe (PASE ≤ 45). Disease progression (DP) was defined as PCa upgrading and/or upstaging. Chi square and Mann-Whitney tests compared categorical and continuous variables, respectively. Uni-/multivariable Cox regression analyses assessed predictors of DP. Kaplan-Meier method was performed to estimate the predictive role of the three Sedentary lifestyle classes on the same outcome.

#### Results

Overall, 85 patients were included in the analysis with a median age of 66 (IQR 59-70) years and a BMI of 25.3 (23.5-27). Overall, 14 (16%) were active smokers, 7 (8%) were obese and one presented with metabolic syndrome. Median PASE score was 86 (61.5-115.8). DP occurred in 29% (n=25) of patients. Patients who experienced DP were comparable to those who did not for all baseline variables but PASE score (69.3 vs 87.8; p=0.05). Univariable Cox regression analysis identified physical activity as the only significant predictor of DP (HR 0.98, 95%CI 0.97-0.99, p=0.014). At Kaplan Meier analysis PASE stratification effectively depicted the risk of upgrading/upstaging during AS (log rank p=0.028).

#### Conclusion

Physical activity, assessed by means of the validated PASE questionnaire, represents a significant driver of PCa upgrading/upstaging during AS. Results from the upcoming randomized controlled trials are awaited to confirm our data.

## 9. #308: PRIMARY TRANSRECTAL RANDOM PROSTATE BIOPSY: IS STILL ACTUAL?

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#### Objective

Random prostate biopsy is still the gold standard procedure to detect prostate cancer. Multiparametric MRI has been introduced to guide target prostate biopsy to improve detection of clinically significant prostate cancer. Today is debated whether primary biopsy should be performed with random or target approach. We evaluated outcomes of patients undergone first

transrectal random prostate biopsy. We also evaluated predictive factors of prostate cancer diagnosis.

#### Materials and Methods

Patients with suspicious of prostate cancer based on PSA, DRE, ultrasound findings underwent a TRUS guided transrectal biopsy. Procedure were performed under local anaesthesia or intravenous sedation as indicated. Clinical and pathological data were prospectively collected from May 2010 to September 2019 in our database. We calculated cancer detection rate and we identified predictive factors of cancer. Statistical analysis was performed using Chi square test, Mann Whitney, logistic regression test, as appropriate (SPSS 19).

#### Results

Data on 1974 patients were available. Patients characteristics are reported in table 1. Indications for biopsy are reported in table 2. Prostate cancer has been diagnosed in 46.4% of the patients (table 3). Positive patients presented  $\geq 3$  positive cores or Gleason  $\geq 3+4$  in 78,5% and 86,7%, respectively. At multivariate analysis, age, PSA, DRE, prostate volume, number of cores, and year of biopsy are predictive of cancer diagnosis (tab 4).

#### Discussions

Random prostate biopsy is still the gold standard procedure to detect prostate cancer. Multiparametric MRI has been introduced to guide target prostate biopsy to improve detection of clinically significant prostate cancer. Today is debated whether primary biopsy should be performed with random or target approach

#### Conclusion

Random transrectal prostate biopsy identified cancer in 46% of all patients. In the last three years, cancer detection rate is more than half of the patients. More than three quarters of patients presented a clinically significant cancer. Age, PSA, positive DRE, prostate volume and number of cores are correlated with presence of cancer

## 10. #177: ASSESSING THE IMPACT OF MULTIPARAMETRIC MRI AND FUSION BIOPSY ON UPGRADING & UPSTAGING DURING ACTIVE SURVEILLANCE

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#### Objective

Active surveillance (AS) is a viable but expensive option for low risk prostate cancer. Multiparametric (mp) Magnetic Resonance Imaging (MRI) has been introduced as an optional tool in many surveillance protocols with the aim of improving staging process and consequently of early detecting any potential disease progression. In this study, we assessed the impact of mpMRI and of ultrasound (US)-MRI fusion biopsies on upgrading & upstaging risks in patients under AS.

#### Conclusion

This study support integration of mp-MRI into AS protocols together with established prognosticators, such as PSA density. Identification of patients at significant risk for progression can be useful to proper counsel patients at enrollment, as well as to early identify Us or Ug during AS and to switch patients to radical treatment.

## 11. #305: THE COST OF ROBOT-ASSISTED LAPAROSCOPIC PROSTATECTOMY. ECONOMIC EVALUATIONS AT A REFERRAL CENTRE

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#### Objective

Since the introduction of robotic surgery for radical prostatectomy, the cost-benefit of this technology has been under scrutiny (1, 2). While robotic surgery has shown to offer multiple advantages, including reduced blood loss, reduced length of stay, and expedient recovery, the associated costs tend to be significantly higher, secondary to the fixed cost of the robot as well as the variable costs associated with instrumentation. This study analyzes the cost of robotic prostatectomy in a referral center and compares it to the DRG reimbursement amount.

#### Materials and Methods

Our experienced surgical team performed robotic assisted laparoscopic prostatectomy (RALP) at the Multidisciplinary Centre for Robotic Surgery of Pisa Hospital. A retrospective analysis of patients who underwent RALP for prostate cancer was performed: preoperative, operative and post-operative costs were evaluated.

## Results

According to our analysis, preoperative assessment cost € 111.0. The total amount of the operative phase was € 5693,0, including € 801,0 for surgical team, € 1110,4 for surgical room and € 3781,8 for medical devices and drugs. Post-operative period was estimated to cost € 739.0. Hence, a total amount of € 7852,0 per patient submitted to RALP was estimated.

## Discussions

While potential benefits of robotic technology include decreased morbidity and improved recovery, some have suggested a prohibitively high cost. According to a recent revision of the Regional Government of Tuscany, the DRG reimbursement amount has been raised from € 4234.0 to € 9677.0 leading to a positive financial balance for the hospital of € 1824.9. Before this modification took place, considering the DRG reimbursement of € 4234.0, the financial loss per patient was € 3618,0.

## Conclusion

Robotic technology in prostate cancer surgery has shown to offer several advantages in comparison to open procedure; however the higher cost of robotic surgery has been matter of debate in the recent years. The recent modification of the DRG reimbursement allows the hospital to offer patients an excellent treatment avoiding the loss of a significative amount of money

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## 12. #141: ROBOTIC ASSISTED LAPAROSCOPIC PROSTATECTOMY (RARP): AUTOLOGOUS SLING WITH THE DENONVILLIERS MUSCULAR PORTION AND SUBSEQUENTLY EARLY CONTINENCE. PRELIMINARY DATA

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## Objective

Urinary continence (UC) recovery remains bothersome for patients even after RARP(1). Analyzing the results published by the group of Cestari(2) we have developed a technique of Sling (3) using the Denonvilliers muscular portion. We describe our new surgical technique for retropubic suburethral autologous sling created during RARP using the Denonvilliers muscular portion. The surgical technique and preliminary data regarding its effectiveness in improving early UC recovery are presented.

## Materials and Methods

Between september and november 2019, 50 patients who underwent RARP at a single high-volume center were prospectively randomized into sling and non sling groups. Early UC was assessed at 7 days (time of catheter removal), 15 days, and 30 days postoperatively by the daily number of pads used and the International Consultation on Incontinence Questionnaire-Urinary Incontinence-Short Form (ICIQ-UI-SF) score. Sling-related operative time and urethral erosion were also analyzed.

## Results

Complete data were available for all patients. Mean  $\pm$  standard deviation (SD) numbers of pads used daily in nonsling and sling groups, respectively, were  $1.9 \pm 1.2$  versus  $1.7 \pm 1.4$  ( $P=0.5$ ) at 7 days,  $1.8 \pm 1.3$  versus  $1.3 \pm 1.3$  ( $P=0.1$ ) at 15 days, and  $1.1 \pm 1.2$  versus  $0.4 \pm 0.8$  ( $P=0.01$ ) at 30 days. At 1 month, mean  $\pm$  SD ICIQ-UI-SF scores in nonsling and sling groups, respectively, were  $4.8 \pm 4.6$  versus  $1.8 \pm 3.4$  ( $P=0.01$ ); sling patients were associated with pad-free status (76% vs 46%,  $P=0.03$ ). Surgical time did not differ between groups, and in sling patients, no cases of urethral erosion or uroflowmetry suggestive of urinary obstruction were found. Limitations included the small cohort of patients.

## Discussions

The suburethral autologous sling is technically feasible and may improve early UC recovery after RARP

## Conclusion

Our new surgical technique for retropubic suburethral autologous sling created during RALP using the Denonvilliers muscular portion is simple and easily reproducible. These preliminary results should be confirmed in a larger sample of patients

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### 13. #152: VIDEO CONTENT ANALYSIS OF 20 ROBOT-ASSISTED LAPAROSCOPIC PROSTATECTOMIES FOR EVALUATING POTENTIAL MECHANISMS OF IATROGENIC NERVE LESIONS AND PREVENTIVE PRACTICAL SUGGESTIONS

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#### Objective

Robot-assisted laparoscopic prostatectomy (RALP)[1] is the most frequent strategy used for the surgical remedy of patients with localized prostate cancer. Although there is awareness about potential patient positioning nerve injuries, iatrogenic nerve lesions are less described in the literature [2]. Here, we report 3 cases of patients who presented with neuropathic painful complications due to RALP-associated nerve lesions.

#### Materials and Methods

A 62-year-old patient (case 1), a 72-year-old male (case 2), and a 57-year-old patient (case 3) presented at the clinic with symptoms of neuropathic pain after RALP surgery. Patients were diagnosed with a potential injury of different branches of the pudendal nerve (cases 1 and 2), and left obturator nerve (case 3). Patients underwent multimodal pharmacologic treatment through pregabalin, weak opioids, strong opioid, paracetamol, and adjuvants. In cases 2 and 3, a multidisciplinary approach was needed. As the patients responded to conservative treatment, invasive approaches were not necessary.

#### Results

After treatment, the patients of case 1 showed pain relief after 4 days, paresthesia resolved in 15 days, whereas the anal crushing sensation lasted for approximately 1 month. In case 2, after 4 weeks of treatment, the patient experienced a considerable decrement in pain intensity with complete response after 4 months. In case 3, pain relief was achieved after 2 days, motor symptoms recovery after 2 weeks, and neuropathic features resolved completely after 5 weeks although the obturator sign resolved within 2 months.

#### Discussions

During RALP surgery, a wide range of surgical injury to the pelvic nerves may occur. The pathophysiology of these damages recognizes different mechanisms such as compression (e.g., due to hematoma or pelvic lymphoceles), transection, incision, traction, thermal injuries, entrapment with clips. The evaluation of possible risk factors is of fundamental importance both for the prevention of complications and for their rapid identification and treatment [3-6]. In case 1, the damage to the inferior rectal nerve occurred for thermal injury or traction on straight during the preparation procedure of the backplane, or during Rocco stitch. The complication was probably also related to the extent of prostatic pathology, as reported by the definitive histologic examination. The extent of the pathology, therefore, was certainly a major risk factor. Concerning the mechanism of neuropathy responsible for the clinical picture described in the second case, it can be explained as a possible injury occurred during the running stitch and the additional suture of Santorini plexus. The bilateral nerve damage may explain the severity of the neuropathic painful condition, whereas the presence of a particularly represented plexus and a connective tissue at the pubic symphysis represented a considerable risk factor. Case 3 regards a lesion of the left obturator nerve. This nerve originates from the ventral rami of the 2nd, 3rd, and 4th lumbar nerve roots. It follows the iliopectineal line into the lesser pelvis, runs along the lateral pelvic wall and then enters into the obturator foramen via the obturator canal. Within the canal, the nerve divides into an anterior branch, posterior branch, and a branch to the external obturator muscle then. Then, it exits through the obturator tunnel and enters the thigh. The sensory distribution of the nerve encompasses the anteromedial hip joint, the medial knee joint, and the skin on the inner thigh just above the medial knee from the anterior branch. The obturator nerve injury is described as a rare complication of robotic-assisted PLND. Because the obturator nerve can be adherent to lymph nodes or enclosed by them, a careful nerve mobilization should be performed, and fixed lymph nodes should not be mobilized roughly. Specifically, the proximal part of the obturator nerve runs closely the external iliac vein and the internal iliac artery. This is the location of the internal iliac lymph nodes. In our case, we suppose that the nerve damage was caused during the extensive PLND through a thermal injury of the nerve at the entrance of the obturator fossa. Alternatively, a compressive effect on the nerve was produced by a PLND-induced lymphocele. The combination of both mechanisms seems to be another plausible explanation. According to this latter hypothesis, the early multimodal pain strategy and antiedematous therapy may explain the rapid resolution of the clinical picture [7-8]. Several suggestions focused on improving surgical technique and aimed at avoiding neurologic complications can be proposed. Firstly, the thermal energy should be minimized by using bipolar output energy <35 and <50 W in monopolar. Furthermore, hemostasis through microsutures (e.g., 4-0 braided absorbable suture CV-25 TAPER 1/2 circle 17 mm Polysorb; Covidien) can represent a less invasive approach. Other suggestions concern the use of titanium clip during dissection, Rocco stitch (e.g., 3-0 V-Loc barbed absorbable suture GU-46 TAPER 5/8 circle 27 mm; Covidien) performed not through full-thickness modality. Finally, because the different branches of the pudendal nerve run laterally and dorsal to the rectum it should be recommended to minimize traction maneuvers during the procedure of prostate detachment.

#### Conclusion

The RALP-associated neurologic injuries may occur even when performed by highly experienced surgeons. A better understanding of the potential iatrogenic nerve lesions can surely allow an improvement in the surgical technique. A multidisciplinary approach and early multimodal pain strategy are mandatory for managing these complications.

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#### 14. #192: ANDROGEN RECEPTOR COPY NUMBER AND CIRCULATING TUMOR CELLS AS LIQUID BIOPSY PROFILING IN CASTRATION RESISTANT PROSTATE CANCER PATIENTS TREATED WITH CABAZITAXEL

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##### Objective

Cabazitaxel demonstrated overall survival (OS) benefit for the treatment of metastatic castration resistant prostate cancer (mCRPC) patients progressing after docetaxel [1]. Predictive biomarkers able to identify responsive patients are urgently needed to improve outcome of mCRPC patients. Liquid biopsy, including circulating plasma DNA and circulating tumor cells (CTCs), has the potential to guide treatment decision. Plasma androgen receptor (AR) copy number (CN) status has been identified as one of potential biomarker of response in patients with mCRPC receiving docetaxel [2] or the AR-targeted therapies (abiraterone or enzalutamide) [3]. CTCs profiling could also help to establish novel biomarkers. In this study (NCT03381326), we aimed to evaluate the prognostic role of plasma AR CN and CTCs biomarkers expression in mCRPC patients treated with cabazitaxel.

##### Materials and Methods

We included patients receiving cabazitaxel from January 2015 to December 2018. Progressive disease was defined according to Prostate Cancer Working Group 2 (PCWG2) criteria. Plasma DNA was isolated using QIAamp Circulating Nucleic Acid Kit and digital PCR was performed to assess AR CN status. CTCs enrichment was evaluated with AdnaTest EMT-2/StemCell kit. Expression analyses using real time PCR were performed for 17 genes and CTCs positivity was defined as the expression of at least one of the following seven relevant markers: AR-V7, AKT, AR, EPCAM, PSMA, PI3KCA, PSCA. This study is partially funded by Sanofi Genzyme.

##### Results

We enrolled 80 patients, all receiving prior docetaxel and 85% prior abiraterone and/or enzalutamide. Median age was 72 years (range 49-82). Median OS and progression-free survival (PFS) were 16.4 months (95% CI 11.1-27.0) and 6.7 months (95% CI 5.2-8.3), respectively. Baseline plasma AR CN gain was detected in 36 (45%) patients. AR CN normal and AR CN gain patients had a OS of 27 and 11.1 months, respectively ( $p=0.013$ ). AR CN normal and AR CN gain patients had a PFS of 8.5 and 5.9 months, respectively ( $p=0.032$ ). Fifty-eight (72.5%) patients showed CTCs positivity at baseline, whose 15 (26%) expressed  $\geq 3$  markers in CTCs. Significantly worse OS was observed in patients with  $\geq 3$  markers expressed in CTCs compared to those with  $\leq 3$  markers and CTCs negative patients [4.7 months vs 15.2 vs 31.7 months respectively, hazard ratio 6.05 (95% CI 2.07-17.73),  $p=0.004$ ]. No significant difference was observed for PFS and PSA response. Twenty-eight patients showed AR CN gain and CTCs positivity, whose 9 expressed  $\geq 3$  markers, whereas 30 patients showed AR CN normal and CTCs positivity, whose 6 expressed  $\geq 3$  markers. No significant correlation between AR CN and CTCs positivity was found ( $p=0.3130$ ). Expression analyses on CTCs biomarkers are ongoing.

##### Discussions

In this study we have investigated the role of AR CN and CTCs positivity in stratifying mCRPC patients treated with cabazitaxel. We found significantly worse OS and PFS in patients with AR CN gain compared to AR CN normal. These results are in line with those found in a recent multicenter study [4]. Moreover, we observed a significantly shorter OS in patients expressing  $\geq 3$  markers compared to the others, showing the importance to characterize CTCs expression markers. Although no significant correlation was found between AR CN and CTCs positivity, ongoing expression analyses could reveal potential responsive or more aggressive tumors, leading to a better personalized treatment selection.

## Conclusion

Liquid biopsy profiling, beyond any single biomarker, may improve prognostication of mCRPC patients treated with cabazitaxel. Further prospective larger studies are needed to validate the results.

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## 15. #204: PERIOPERATIVE SURGICAL OUTCOMES AND ANESTHESIOLOGICAL MANAGEMENT DURING ROBOT ASSISTED LAPAROSCOPIC RADICAL PROSTATECTOMY: A SINGLE INSTITUTION EXPERIENCE WITH THE USE OF TRANSVERSUS ABDOMINIS PLANE BLOCK (TAP-BLOCK)

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## Objective

With the implementation of the robotic assisted laparoscopic surgery, anesthesiologists have to face new challenges in the patient care. Shortening the hospital stay, while offering a good standard of postoperative care is often achieved by combining the minimally invasive robotic technique with a tailored multimodal anesthesia protocol. TAP block (Transversus Abdominis Plane Block) has been widely used in laparoscopic surgery, and many Authors are reporting his use in multimodal protocols applied to robotic assisted surgical procedures (1). However the use of TAP block in robotic assisted radical prostatectomy is not extensively reported. The aim of this study was to evaluate the role of TAP block in improvement of anesthesiological management and of perioperative surgical outcomes of robot-assisted laparoscopic radical prostatectomy (RALP).

## Materials and Methods

25 patients who underwent RALP at our institution were randomized in two groups (Group A: TAP block; Group B (No TAP block)). All patients received as premedication Fentanyl 100 mcg, midazolam 2 mg. Anesthesia was induced using propofol 2 mg/kg, rocuronium 0,6 mg/kg and remifentanyl titrated according to the depth of the analgesia. After orotracheal intubation, if the TAP block was performed, we injected Ropivacaine 0,375% and dexamethasone 4mg. RALP was performed by a single surgical team with a transperitoneal approach. All data were collected in a prospectively maintained database and retrospectively analysed. Descriptive statistics of categorical variables focused on frequencies and proportions. Mean values with standard deviations ( $\pm$ SD) were computed and reported for all items. Statistical significance was achieved if p-value was  $\leq 0.05$  (two-sides). Statistical analyses were conducted using SAS version 9.3 software (SAS Institute, Inc., NC).

## Results

The two groups showed no difference in terms of patients' baseline characteristics in the most important variables [age, BMI, comorbidity according to ASA score, surgical time] (Table 1) Table 2 shows the perioperative outcomes of the two groups. In particular patients of group A showed a longer time of anaesthesia without reach the statistical significance. Group A was found to be similar to group B in terms of NRS PACU and at 12, 24, 48, 72 hours but not at 96 hours. Ketorolac doses used in Group A were not significantly lower than Group B. Rescue Analgesic Medication use was significantly higher in the Group B. In particular in a patient of Group A we used Contramal 50 mg / 1 ml at T0 while in the Group B we used Morphine 2mg at 12 post-operative hours in two patients, Morphine 2mg in three patients at T0 and Ketorolac 30 mg in one patient at T0. In patients of Group A we used  $128 \pm 156.84$  mg of Tramadol while in the Group B we used 20 mg of Morphine in all patients. The dose of Remifentanyl used was 0.05 mcg/kg/min in the Group A and it was lower (0.05 mcg/kg/min) than in the Group B. Moreover, patency of the intestinal tract and time to ambulation was significantly lower in the Group A.

## Discussions

The peri-operative management of patients undergoing robotic-guided procedures is an interesting yet not fully explored field. Managing the intra and post-operative pain in this population may result challenging if the matter is not approached by the whole team involved in the procedure and in the care of the patient. Including the TAP block in our protocol resulted in a statistically significant better post-operative pain control in the first 72 hours (2) and faster complete recovery of bowel functionality. This can be correlated indeed with the reduction of intra and post-operative use of opiates and the switch from morphine (a strong opioid) to tramadol (a weak opioid) in the patients that received the preoperative TAP block. Moreover almost all patients who underwent TAP block got ambulation during the same operating day, probably due to the better pain control. However this result is not only limited to the application of this locoregional anesthesia technique, in fact different health professionals, to a different degree, contributed to reach such result. First of all, our surgical team applied of low pneumoperitoneum pressures along with the application of the AirSeal technology, reducing the irritative stimulation on the peritoneum and the phrenic

nerve. Secondly, using the Pink Pad device the nurses placed and secured the patient on the operating table, allowing to maintain safely the steep Trendelenburg position (30° degrees) required for performing the robotic radical prostatectomy. This allowed us to avoid potential nervous lesions and post operative shoulder pain caused by the placing or the laparoscopic procedure itself. Lastly the PACU (post-anesthesia care unit) and ward nurses were specifically instructed to avoid administering rescue analgesia using morphine, prioritizing the use of NSAIDs (Nonsteroidal anti-inflammatory drugs) such as Ketorolac and Paracetamol and the reduction of the rescue analgesia intervention met our statistically significant threshold as well.

#### Conclusion

According to our result we are positive to conclude that a multimodal protocol that includes: locoregional anesthesia, reduction of intra and postoperative use of strong opiates, correct placing and use of low pneumoperitoneum pressures should be implemented in order to reach a faster and better post-operative full recovery of patients whose underwent RALP.

#### Reference

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# Video 4 - Calcolosi e Andrologia

## 1. #259: RIRS PERFORMED IN SITU FOR LOWER POLE RENAL STONES: CAN WE ACHIEVE A GOOD OUTCOME?

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When performing RIRS for lower pole stones dislocation of the stone is usually suggested. The main reason of that is the high risk of ureteroscope damaging due the extreme and prolonged flexion. Less is known about real efficacy of lithotripsy if performed in situ. In this video to present a detailed report of our experience about the efficacy of RIRS with lithotripsy performed in situ in case of non dislocable stones or favorable anatomy. RIRS performed in a single Center from 2011 to 2016 were retrospectively analyzed. Single stones  $\leq 15$  mm in the lower pole were selected. We created 2 groups: in group A stones were treated in situ, in group B stones were dislocated before lithotripsy. Success was considered in case of stone free or residual fragments  $\leq 4$  mm. Complete data were available for 93 patients. Stones were treated in situ in 61 cases (group A) and after dislocation in 32 (group B). RIRS performed in situ for lower pole renal stones have a low success rate, even if the caliceal anatomy allows an easy access to the stone. Success rate is low for smaller stones as well. When the preoperative evaluation suggests poor chance of displacing, patient is informed about mini or Ultramini ECIRS.

## 2. #258: HIGH-FREQUENCY DUSTING USING A 120-W HOLMIUM LASER DURING FLEXIBLE URETEROSCOPY: A SINGLE-CENTRE EXPERIENCE

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In this video to present a detailed report of our experience about Low Energy (LE)/High Frequency (HF) lithotripsy (settings 0.2-0.5J / 50-80Hz – 10-40W) by using a 120-W high-power Ho:YAG system and to propose our technique. Our technique consists in 3 phases: 1) Contact Laser lithotripsy (LE/HF/LPW dusting – 0,5 J/50 Hz or 02 J/70 Hz in relation to stone Hardness), 2) Extraction of main fragments (both for treatment and for stone analysis), 3) Non-contact Laser lithotripsy (LE/HF/Short Pulse Width Pop Dusting – 0,5 J /80Hz). From December 2017 to January 2019 104 LE/HF/LPW RIRS had been performed in Cuneo Hospital. Follow-up was conducted with a CT scan performed at 3 months after RIRS and the procedure success was defined as stone-free or presence of  $\leq 4$  mm fragments (CIRF). All patients underwent a 3 months post-operative therapy with potassium citrate (3025,4 mg/100 ml/die) and magnesium citrate (1136,4 mg/100 ml/die). Overall success rate at 3 months CT scan was 88,5% (71,2% stone-free and 17,3% CIRF). Early post-operative complications were reported in 4,6%. The application of LE/HF/LPW RIRS for the treatment of renal stones seems to be safe and effective, in terms of positive success rate, low number of complications and reduced operative time.

### 3. #195: A VERY CHALLENGING SCROTOPLASTY FOR A LARGE SCROTUM AS CONSEQUENCE OF PENILE AMPUTATION WITH INGUINAL LYMPHNODES DISSECTION

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A 60-year-old was referred to our attention for a large scrotum showing spontaneous exudation in standing position. Past medical history included depression due to the enormous scrotum that prevented him from a normal social life, hypertension (treated with ACE inhibitors). Urological medical history included benign prostatic hyperplasia (BPH) treated with alpha-blockers, previous partial penile amputation for carcinoma in situ of the glans (2013) and subsequent inguinal lymphnodes dissection (ILND). Both surgeries were not performed at our hospital. A scrotoplasty was performed at our Andrology department in collaboration with the plastic surgery operative unit. The procedures required an excision of about 3 kilograms of imbibed lymphatic skin tissue respecting the funiculus and testicles that appear enormously increased in volume due to lymphostasis. A double flap reconstruction is performed with large excision of exceeding tissue. The pathology report of the skin flap (35 x 20 x 10 cm) described a morphological picture consisting of an epidermal line with hyperkeratosis and papillomatosis. A reactive myofibroblastic proliferation associated with a marked edema with small vessels with thickened walls and bundles of hyperplastic dartos is observed in the dermis and hypodermis. Scrotal lymphedema is confirmed. No postoperative complications occurred. At one month follow-up the scrotum resulted very reduced in size and patient solved his depression.

### 4. #292: MEGAPENE ACQUISITO: CORPOROPLASTICA RIDUTTIVA CON RINFORZO IN PERICARDIO BOVINO

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Si descrive correzione chirurgica di raro caso di cedimento strutturale dell'albuginea di entrambi i corpi cavernosi, esteso per pressochè tutta l'asta con risparmio di pochi centimetri alla base, con risultante incremento circumferenziale del pene tale da rendere fortemente disagiata l'attività sessuale penetrativa. Caso clinico: paziente di 55 anni con sviluppo senza causa apparente di deformazione simil-aneurismatica del pene con circonferenza massima di 21 cm. Rigidità conservata. Iter diagnostico: cavernosometria/-grafia dinamica e RNM basale e dinamica, con conferma di dilatazione aneurismatica di entrambi i corpi cavernosi. Tecnica chirurgica: incisione circumferenziale e degloving dell'asta, estrusione dell'asta tramite incisione scrotale. Bilateralmente incisioni parauretrali a tutta lunghezza della fascia di Buck e completo scollamento della stessa – con nel suo contesto il fascio neurovascolare dorsale – dai corpi cavernosi. Erezione indotta: albuginea assottigliata nell'area di cedimento strutturale. Misurazioni circumferenziali seriate e calcolo della riduzione circumferenziale da ottenere. Conseguente asportazione bilaterale di losanghe di albuginea. Punti di ancoraggio introflettenti in Biosyn rinforzati da continua incavigliata in PDS. Confezionamento di patch in pericardio bovino (Supple Peri-Guard, Synovis) a coprire l'intera circonferenza dell'albuginea denudata, ad eccezione del corpo spongioso uretrale, fissata con punti di ancoraggio all'albuginea. Ricostruzione di fascia di Buck. Reinserimento dell'asta nel proprio involucre cutaneo. Circoncisione formale.

### 5. #291: MINI-JUPETTE NELLA CLIMACTURIA DOPO PROSTATECTOMIA RADICALE: CAVEAT DOPO PRIMA ESPERIENZA

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Descrizione di sling uretrale "Mini-Jupette" eseguito in corso di impianto protesico penieno idraulico tricomponente per trattare incontinenza ad orgasmo ("climacturia") e deficit erettile severo dopo prostatectomia radicale. Caso clinico: paziente di 71 aa status/post prostatectomia radicale robotica e successiva radioterapia di salvataggio, fortemente motivato a ripresa attività coitale penetrativa, nonostante modica incontinenza e climacturia. Si esegue intervento di Mini-Jupette sec. Andrienne. Incisione scrotale trasversa come da impianto protesico con accesso penoscrotale; esecuzione di corporotomie latero-caudalmente rispetto a impianto standard. Misurazione di distanza tra i margini mediali delle corporotomie e confezionamento di mesh in polipropilene (Pro-Lite, ATRIUM) di misure corrispondenti. Sutura dello stesso in continua alle due corporotomie (margini mediani) e verifica di appropriata tensione. Inserimento standard di protesi idraulica tricomponente. Chiusura corporotomie in continue. Protesi lasciata disattivata. In prima giornata: rimozione catetere e drenaggio, e dimissione. Follow-up precoce: completa risoluzione di incontinenza, e ripresa di attività coitale senza climacturia. A termine video vengono illustrati i principali caveat di questa procedura, alla luce della limitata letteratura disponibile e della prima esperienza personale.

# Comunicazioni 6 - High Technology IPB

## 1. #137: THULIUM LASER ENUCLEATION (THULEP) VERSUS TRANSURETHRAL BIPOLAR PROSTATE RESECTION (TURP): PROSPECTIVE RANDOMIZED STUDY: EARLY INTRA- AND POSTOPERATIVE RESULTS

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### Objective

Comparison of early intra- and postoperative clinical results between transurethral enucleation of the prostate with thulium laser (1) (ThuLEP) and transurethral bipolar resection of the prostate (TURP) for the treatment of benign prostatic hyperplasia (2) (BPH) in a prospective randomized trial

### Materials and Methods

In the study 650 consecutive patients with BPH were randomized: ThuLEP (n = 350) and TURP (n = 300). The parameters evaluated were: blood loss, catheterisation time, irrigation volume, hospital stay and operating time. At 3 months after surgery they were evaluated: International Prostate Symptom Score (IPSS), maximum flow (Qmax) and postmicturitional residue (RPM)

### Results

Patients in each study arm did not show any significant differences in preoperative parameters compared to TURP, ThuLEP required the same operating time ( $53.69 \pm 31.44$  vs  $61.66 \pm 18.7$  minutes,  $P = .123$ ) but resulted in a reduction in lower hemoglobin values ( $0.45$  vs  $2.83$  g/dL,  $P = 0.005$ ). ThuLEP also determined less non statistically significant catheterisation time, lower irrigation volume ( $29.4$  vs  $69.2$  L,  $P = 0.002$ ) and lower non-significant hospital stay ( $1.7$  vs  $2.5$  days). During the 3-month follow-up, procedures did not show a significant difference in Qmax, IPSS, PVR and QOLS.

### Discussions

ThuLEP and TURP reduce both symptoms of the lower urinary tract with efficacy and safety (2-3)

### Conclusion

ThuLEP is statistically superior to TURP in terms of blood loss, irrigation volume. However, procedures do not differ significantly in Qmax, IPSS, RPM and QOLS for up to 3 months of follow-up.

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## 2. #140: THULIUM LASER ENUCLEATION VERSUS TRANSURETHRAL PROSTATE RESECTION: IMPACT ON ERECTILE FUNCTION

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### Objective

In this study, we compared the results of sexual function in patients with benign prostatic hyperplasia (BPH) treated with transurethral prostate resection (TURP) or laser thulium enucleation (ThuLEP) (1-2).

## Materials and Methods

We performed a retrospective analysis of patients undergoing transurethral resection and endoscopic enucleation of the prostate for BPH; the inclusion criteria were the presence of bladder obstruction (IPSS  $\geq$  20, Qmax  $\leq$  10 mL/s). Erectile function (EF) was evaluated using the International Erectile Function Index (IIEF-5) both before the endoscopic examination and after six months.

## Results

A total of 650 patients with BPH were included in the study; of these, 350 underwent ThuLEP and 300 TURP. Preoperative IIEF-5 in the TURP and ThuLEP groups was  $11.7 (\pm 4.5)$  and  $11.1 (\pm 5.0)$ , respectively ( $p = 0.17$ ). At six months the IIEF-5 score was unchanged ( $p = 0.26$  vs  $p = 0.08$ ) and comparable in both groups ( $p = 0.49$ ). However, the mean score of IIEF-5 showed a significant increase of 0.72 in the ThuLEP group, compared to a decrease of 0.24 in patients with TURP ( $p \leq 0.001$ ).

## Discussions

Both TURP and ThuLEP are effective methods in managing bladder obstruction due to BPH. At six months follow-up after surgery, both techniques lead to a comparable IIEF-5 score.

## Conclusion

Our results have shown that ThuLEP is more likely to preserve erectile function with an increase of IIEF-5 at six months than TURP which results in a slight decrease in the IIEF-5 score.

## Reference

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### 3. #207: AFTER 6 YEARS, STUDY COMPARING GREENLIGHT TM XPS 1800 W LASER AND TRANSURETHRAL RESECTION OF THE PROSTATE FOR THE TREATMENT OF BENIGN PROSTATIC HYPERPLASIA

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## Objective

Transurethral resection of the prostate (TURP) is still considered the gold standard surgical treatment for symptomatic benign prostatic hyperplasia (BPH). However, photoselective vaporization of the prostate (PVP) has gained widespread global acceptance in national guidelines as a safe and effective alternative option. Nevertheless, further evidence is required to assess the durability of Greenlight PVP. Herein, we report our six years of PVP experience with the Greenlight 180W XPS laser system. We compared Green laser PVP with transurethral resection of the prostate (TURP) in subjects with symptoms of lower urinary tract secondary to benign prostatic hyperplasia.

## Materials and Methods

We compared the clinical course of patients operated with PVP to a group of patients similar in age, prostate volume and symptomatology evaluated with IPSS, before and after surgery. The trial was designed as a non inferiority trial, and the primary outcome was IPSS at 6 months. A margin of 3 IPSS was chosen to assess non-inferiority PVP as this is the accepted limit in which patients can feel the difference. Other key endpoints were pre-specified Qmax, incidence of complications, PVR, PSA, and the reduction of prostate volume. 180 patients were enrolled between October 2013 and October 2019 of which 88 PVP, 92 TURP

## Results

All 180 subjects who completed 6 months of follow-up visits. The two treatment groups were similar with respect to demographic and baseline characteristics. The median procedure Rates for PVP and TURP were 46.0 minutes and 36.0 minutes, respectively. The mean difference in IPSS at 6 months was 2 (mean values of 6.8 for the PVP arm and 5.5 for the TURP arm, 95% CI for the mean difference, 0.1 to 2.6). Since the upper limit of the 95% confidence was under 3, the statistical criterion for the non-inferiority was reached ( $p = 0.004$ ). Mean Qmax was not significantly different at 6 months (23.3 vs. 24.4 PVP to TURP, 95% CI for the mean difference -3.9-1.8), satisfy the criterion of non-inferiority for Qmax with  $p = 0.003$ . Freedom from complication rate was similar between the two groups (87.9% vs 82.8% for the PVP to TURP; 95% CI for the group difference of -3.6% to 13.8%) and PVP criterion for non-inferiority was reached ( $p = 0.012$ ). secondary noteworthy endpoints have shown that PVP has resulted in fewer serious bleeding events (macroscopic hematuria, clot retention, hemorrhage) 2.2% as against 6.8% for TURP, low short-term re-intervention rate (2.9% vs. 9.8%) and, sometimes catheterization median (22.0 hours. vs. 46.7 hours.) and reduced average length of hospital stay (39.3 hours. vs. 78.2 hours).

## Discussions

According to the American and other international guidelines, surgery should be suggested as an option to patients having one or more of the following: urinary symptoms refractory to maximal medical therapy, gross hematuria, recurrent infections, bladder stones, or deterioration of kidney function.(1-3) Transurethral resection of the prostate (TURP) remains the gold standard treatment for LUTS secondary to BPH.1 However, this intervention is associated with safety issues, particularly in patients taking anticoagulation therapy and those with larger prostates (>80 cc).(4,5)

Over the past decades, Greenlight (GL) 532 nm laser photo selective vaporization of the prostate (PVP) has gained widespread acceptance as a safe and effective alternative to TURP.(3,6) This technology is based on a 532 nm length laser that vaporizes the highly vascularized transitional prostatic zone by selectively heating the hemoglobin.(7,8) the Goliath study is the only prospective, randomized clinical trial comparing 180W XPS and TURP with an exclusion of any patient in urinary retention. (6) At two years, they reported an IPSS score of 6.9, which suggests a drop of 14.3 points (67.5%) from baseline (21.2 points). Despite its merits, our study has certain limitations that need to be mentioned. Results are obtained from a retrospective analysis of a prospectively maintained database of a single surgeon in a single institution.

#### Conclusion

In conclusion, in this large PVP RCTs they have demonstrated efficacy comparable to TURP with fewer serious side effects, decreased time of catheterization and shorter length of stay in hospital.

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## 4. #263: BIPOLAR PLASMA ENUCLEATION OF THE PROSTATE VS OPEN PROSTATECTOMY IN LARGE BENIGN PROSTATIC HYPERPLASIA: A SINGLE CENTRE 3-YEAR COMPARISON

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#### Objective

Aim of our study is to compare surgery outcomes and safety of button bipolar enucleation of the prostate vs open prostatectomy in patients with large prostates (>80g) in a single center cohort study.

#### Materials and Methods

All patients with lower urinary tract symptoms due to benign prostatic enlargement undergoing button bipolar enucleation of the prostate (B-TUEP) or open prostatectomy (OP) between May 2012 and December 2013 were enrolled in our study. Data on clinical history, physical examination, urinary symptoms, erectile function, uroflowmetry and prostate volume were collected at 0,1,3,6,12,24 and 36 months. Early and long-term complications were recorded.

#### Results

Overall, 240 patients were enrolled. Out of them 129/240 (54%) performed an OP and 111/240 (46%) performed a B-TUEP. In terms of efficacy both procedures showed durable results at three years with a reintervention rate of 7.5% in the OP group and of 5% in the B-TUEP group. In terms of safety B-TUEP presented less high-grade complications when compared to OP.

#### Conclusion

In our single center study, B-TUEP represents a valid alternative to OP with excellent outcomes at three years. Further multicentre studies should confirm our results.

## 5. #226: FIRST PROSPECTIVE RANDOMIZED STUDY COMPARING HoLEP AND MoLEP IN A COHORT OF 140 PATIENTS

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#### Objective

BPH is a common condition in older men. Several techniques use laser energy to resect, enucleate or ablate hyperplastic prostate tissue. Holmium laser is used for HoLEP (H). MoLEP (M) is a usage of HoLEP technique that endorses a modified laser pulse with Moses™ technology (Lumenis®). We did a prospective randomized trial on H vs. M to expand assess data on safety and efficacy of M enucleation in BPH treatment.

## Materials and Methods

This is a single-centre trial was a single-centre open-label phase 3 trial, approved by our local committee and conducted in Treviglio (BG), Italy. Patients were men with moderate to severe BPH-associated symptoms refractory or intolerant to medical therapy or with acute or chronic urinary retention and prostate volume of  $\geq 80$  ml, and enrolled if they agreed to participate the trial; were excluded if had previous surgery, or suspected for prostate cancer, untreated urinary infection, of neurological bladder or had severe cardiovascular. 140 patients (70/70 H/M) patients were randomized preoperatively in a 1:1 fashion to H-arm or M-arm. All the procedures were performed by a single experienced operator using the traditional 3 lobes technique, the only difference was the use of MOSES™ technology in M's arm. Primary endpoints were the evaluation of the difference in operation time and laser time. The secondary endpoints was safety. Comparisons of means in the paired sample was performed with a two-tail T-test ( $\alpha$  power of 0.05 to observe a 10% difference in time of enucleation).

## Results

Median age, basal PSA and prostate volume were similar. Mean laser duration was 5 minute shorter in arm M (36.4 vs 31.5 min.;  $P=.01$ ) There was also a reduced laser fiber consuming ( $P<.01$ ). Perioperative hemoglobin and hematocrit variations were similar. The hospital stay was the same: 2.7 vs 2.8 days.

## Discussions

This trial demonstrate significant that MoLEP outperformed HoLEP in term of laser timing duration due to a 5 minutes shorter laser timing, laser duration was 5 minute shorter in M's arm and this is primarily due to a brief enucleation time in M's arm (30.5 vs 27.1 min.;  $P=.03$ ) maintaining the safety guaranteed by the surgical technique as proven by similar bleeding, complications and hospital stay.

## Conclusion

These data provide demonstration that MoLEP is safe and the most effective treatment for BPH and HoLEP with MOSES™ technology can be proposed as the new standard for HoLEP.

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## 6. #279: TREATMENT OF LARGE VOLUME PROSTATES WITH BIPOLAR PLASMA TURP: PRELIMINARY RESULTS

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### Objective

Trans Urethral Resection of Prostate (TURP) remains still the gold standard and it is strongly recommended for the tre-

atment of patient with moderate to severe LUTS (Lower Urinary Tract Symptoms) with prostate size of 30-80 mL.(1) Patients with oversized prostates > 80-100 mL undergo to traditional open prostatectomy or to a laser enucleation. Aim of our study is to analyze the surgical outcomes and the safety of bipolar plasma TURP extended to oversized prostate.

#### Materials and Methods

Since November 2018 we treated with bipolar plasma TURP seven patients with a prostate volume larger than 100 ml and up to 180 ml. The average age was 69 years (range 51-80); the average prostate size, measured before the procedure by ultrasound, was 137 mL (range 100-180); at the moment of the procedure 4 patients had a bladder catheter (1 suprapubic and 3 transurethral), 2 had history of acute urinary retention, and 1 had severe LUTS and Qmax of 8 ml/s at the uroflowmetry; all of them previously received pharmacological treatment for LUTS (1 only dutasteride, 1 only alpha blocker, and 5 combined therapy with alpha blocker and dutasteride). The TURP was performed using the bipolar plasma edge technology by Lamidey Noury Medical, saline solution as medium, instrument for resection with continuous irrigation system, and high definition video camera and 16:9 high definition monitor. The approach for those oversized prostate was modified, mainly it was a posterior approach to remove first the large medium lobe and then the lateral lobes. The medium lobe was first isolated between 2 tunnels at 5 and 7 o'clock deep to the capsule and extended to apex preserving the veru montanum; the resection was then performed between the 2 tunnels going parallel to the posterior wall, from one side to the other, and upward to downward. For both the large lateral lobes a deep tunnel between the lobe and the prostate capsule (starting at 1 o'clock for the left lobe down to almost 4 o'clock; and at 11 o'clock for the right lobe down to almost 8 o'clock) was first made in order to allow the resection of each lobe from the lateral side to the median part.

#### Results

Average operative time was 71 minutes (range 55-90); mean hospitalization time was 3.3 days (range 2-4); no patient had TUR syndrome neither serum sodium level drop, neither serum sodium level drop; no one required blood transfusion or iron intravenous implementation; no other adverse events were registered. Catheter was removed after 9.6 days (range 3-18) and all of them could void again. After 2 months, one patient, who suffered also Parkinson's disease preferred to have the catheter indwelled again to better manage, according to his opinion, the relapse of severe LUTS.

#### Discussions

The bipolar plasma TURP was performed using normal saline solution (NaCl 0.9%) as fluid for continuous irrigation, instead of a nonconductive solution, offering the advantage of minimal absorption by the open vessels and eliminating the risk of electrolytic disorders, both TUR syndrome and the serum sodium level drop.(2) The resection with the bipolar plasma edge technology is faster with less bleeding because of the attitude of the instrument to cut, vaporize and coagulate smaller vessels at the same time. After the cutting the prostate tissue looks white, not carbonized and it is still soft for further cuttings. We believe that the modified approach for the large lateral lobes gives 2 other important advantages. One is to set immediately the capsular limit of the resection. The second is to create a flap from the lateral lobe which is already ischemized and ready to be fast removed by lateral to median resection going from upward to downward. We believe that both the ultimate plasma technology and the modified approach contributed to a faster and less bleeding resection, allowing a safe operative time for those oversized prostate with volume up to 180 mL.

#### Conclusion

According to other authors (3) the treatment of oversized prostate with bipolar plasma TURP is an effective endoscopic technique and seems to offer surgical results equivalent to those encountered for smaller prostate volumes. The use of saline solution and short operative time confirm the safety of the procedure also for large size prostate. In our single center study bipolar plasma TURP represents a valid alternative to open prostatectomy in large benign prostatic hyperplasia < 180 mL, up today. Because of the low cost comparable to standard TURP, it may be used in centers that do not have yet laser equipment. Larger studies and longer follow up are mandatory to confirm our results.

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# Comunicazioni 7 - Andronews

## 1. #265: PHYSIOTHERAPY AND UROANDROSEXOLOGY TOWARDS ORGASMIC CONSCIOUSNESS AFTER RADICAL PROSTATECTOMY: AN INTEGRATED APPROACH

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### Objective

role of physiotherapy and sexology in the development of a new orgasmic consciousness after radical prostatectomy in order to identify individual and couple sexual well-being

### Materials and Methods

Integrated physiotherapeutic and uroandrosexological pathway which includes: a) physiotherapy pathway: activation and relaxation of the perineal floor in both individual and group sessions, electrostimulation of the perineal floor and biofeedback, b) uroandrosexological pathway: first individual visit one month after surgery with progressive awareness of the new body configuration, clinical evaluation of erectile dysfunction and first interview about the new orgasmic configuration, followed by a first therapeutic pharmacological approach; continuation of the relational path with first individual then couple scheduled visits

### Results

January 2018 October 2019, 90 single incision videolaparoscopic prostatectomies were performed ; 71 (78.8%) of them presented for the first visit in the uroandrosexological path . 15 of them (21.1%) followed the full relational path with particular attention to the climacturia 16 patients were subjected to physiotherapy for stress incontinence: 6 were evaluated to the integrated approach with concomitant uroandrosexological pathway. Of the 10 patients who did not follow the uroandrosexological path : 5 drop out, out of the remaining 5: 4 problems of anxiety inherent to the disease, 1 relationship problems with division by the Partner; out of the 6 enrolled in the integrated approach: only 1 case (16%) reported climacturia ; the remaining 5 patients without climacturia 2 reached full orgasmic consciousness with satisfaction reporting "orgasm as if ejaculating" and 1 patient had a new partner. All 6 patients experienced penetrative success not necessarily mandatory for patient satisfaction. Only in 1 case the partner was involved Out of the total 15 cases subjected to the uroandrosexological pathway The climacturia was referred in 46.6%

### Discussions

The percentage of patients who accepted the uroandrosexological path is still low, demonstrating that there are still resistances in communications in sexology. Patients undergoing physiotherapy had a lower incidence of climacturia. Patients undergoing an integrated approach showed a better quality of life with the goal of "orgasmic consciousness"

### Conclusion

The sample is initial and small, but the successes obtained are the basis for the continuation of the experience

### Reference

Neglected Side Effects After Radical Prostatectomy: A Systematic Review IA. Ullmann, FJ Sønksen M Fode Jou Sex Med Volume 11, Issue 2, February 2014, Pages 374-385

## 2. #246: ORGASMIC CONSCIOUSNESS AFTER RADICAL PROSTATECTOMY: BEYOND SURGERY TOWARD SEXUAL WELLNESS

Maurizio Diambri<sup>1</sup>, Willy Giannubilo<sup>1</sup>, Giuseppe Sortino<sup>1</sup>, Manuel Di Biase<sup>1</sup>, Andrea Marconi<sup>1</sup>, Vincenzo Ferrara<sup>1</sup>

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### Objective

The development of a new orgasmic consciousness after radical prostatectomy for identifying sexual wellness both for individual and for couple

## Materials and Methods

Proposal of an androsexological pathway that includes a first visit one month after surgery with a clinical evaluation of erectile dysfunction and the first individual interview with progressive awareness of personal body configuration after the intervention, orgasmic consciousness with a first therapeutic pharmacological approach. Continuation with a relational path projecting first individual then couple scheduled visits, for a minimum of 4 visits

## Results

January 2018 October 2019 : 90 single-incision videolaparoscopic prostatectomies were performed : 71 (78.8%) presented at the first androsexological visit. 15 of them (21.1%) followed the relational path with particular attention to climacturia. 7 out of 15 (46.6%) had climacturia. Of the remaining 8 patients without climacturia : 4 they reached full orgasmic consciousness with satisfaction reporting "the sensation it is like before but nothing comes out" 1 patient has had a new partner, everyone has experienced a penetrative success not necessarily related to the patient's satisfaction. Of the 7 patients with climacturia 2 full orgasmic consciousness were reported with satisfaction in the muscular contractions itself and with masturbation itself with or without involvement of the partners. Only 3 out of 15 (20%) involved the partners

## Discussions

The percentage of patients who accepted the uroandrosexological path is still low, demonstrating that there are still resistances in communication in sexology

## Conclusion

The successes obtained in patients following androsexological pathway are the basis for the continuation of the experience

## Reference

Neglected Side Effects After Radical Prostatectomy: A Systematic Review IA. Ullmann, FJ Sønksen M Fode *J Sex Med* Volume 11, Issue 2, February 2014, Pages 374-385

### 3. #189: "WHAT DO OUR BOYS KNOW ABOUT SEX?" PRELIMINARY DATA OF A NEW QUESTIONNAIRE FOR THE EVALUATION OF THE KNOWLEDGE OF SEXUALITY AMONG ADOLESCENTS

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## Objective

Adolescents under age 18 are underrepresented in sexual health research, resulting in a lack of data about the consciousness of young people about these issues. The aim of this study was to assess the knowledge about sexuality of adolescents under the age of 18.

## Materials and Methods

The participants were enrolled during a cultural exchange project in September 2019. Adolescents were aged between 13 and 18 years. They come from four different countries: Italy, Portugal, Romania and Greece. The questionnaire was administered anonymously. The parents of the participants had previously signed a specific informed consent. Instructions were as follows: "We are conducting research on adolescent knowledge about sexuality. We invite you to answer as sincerely as possible after having read the instructions carefully. The information collected will not be subject to any merit assessment and will be considered strictly confidential. We thank you for the collaboration." The survey consisted of three parts. The first part concerned generic anthropometric data and a subjective evaluation of the personal knowledge of sexuality and sexual health. The second part contained questions concerning knowledge of the male and female genitourinary system, physiology of reproduction, meaning of terms concerning the sexual sphere, contraceptive methods and sexually transmitted infections. The third part questioned the participants about personal sexual habits.

## Results

The sample was comprised of 80 participants (M age = 16.33 years, SD = .97), 55% of whom identified as female, 45% male. Additional sample characteristics are presented in Table 1. 12.5% of the participants believed they had insufficient knowledge of sexuality; 38.75% scarce; 35% sufficient; only 13.75% believed they had a large knowledge of the subject. The main form of information was represented by internet (51.2%), followed by friends (28.75%). Only the 5% of the adolescents who completed the study stated that they had obtained information from doctors or scientific books. The other sources of information are summarized in Table 2. The percentage of correct and incorrect answers for each question of Part 2 is shown in Table 3. Analyzing the data of part 3, we noticed that only the 10% had a stable partner. The 27.5% of the participants has had a complete sexual intercourse. The 41.3% had a regular masturbatory activity. 95.5% of sexually active subjects used contraceptive methods; of these, the most common was the condom (85.7%), followed by the pill (14.3%). The other information is summarized in Table 4. 55% of the participants had never talked to somebody about sexuality. Among those who had spoken with someone (45%), the preferred interlocutors were friends (61%), followed by family members (22.2%) and teachers (8.3). Additional data are presented in Table 5.

## Discussions

Adolescents are at elevated risk for adverse sexual and reproductive health outcomes relative to their habits, including HIV,

sexually transmitted infections (STIs) and unplanned pregnancy (1). The importance of sexual education is often underlined in schools. Data from the first part indicated that young people did not believe they had sufficient knowledge of sexuality. In fact, 12.5 % of the participants believed they had insufficient knowledge of sexuality; 38.75 % scarce. Moreover, the first source of information was represented by internet for the 51.25% of the adolescents. Unfortunately, the web could be a source of distorted and misleading contents, especially in inexperienced hands. Although the participants declared to have a sufficient (35%) or large (13.75%) knowledge of the subject, we noticed that the percentage of correct answers was of only of 66.7%. Most errors were concentrated in the questions concerning the physiology of reproduction and in those concerning specific terminology. The results of questions concerning the anatomy of the genitourinary system and contraceptive methods and sexually transmitted infections were better. Data of the third part showed how the percentage of sexually active subjects was of 27.5%. Of these, only the 10% had a stable relationship. Teenagers had difficulty talking about sexuality, in particular, with family and doctors. About 55% of participants declared that they never discussed this topic with someone. Often confidants were represented by friends. This could increase confusion and misinformation, leading to incorrect behaviors and lifestyles. Our study has some limitations, first of all the sample size. However, it represents a preliminary experience which, if implemented on a larger scale, could be useful to assess the knowledge of sexual health among European adolescents.

#### Conclusion

We strongly encourage European nations to spread the importance of studying sexual health among adolescents in schools, creating targeted educational programs (2). Improving adolescents' knowledge of these issues could help reduce the number of sexual health problems, such as sexually transmitted infections or unplanned pregnancies.

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## 4. #281: VAC-THERAPY IN UROLOGICAL SURGERY: PRELIMINARY EXPERIENCE

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#### Objective

A review of the literature does not currently have reports on the use of Vac-Therapy in Urology. This therapy has instead been used successfully for years in general surgery, orthopedics, dermatology and burn centers. The aim of this work is to present our experience with Vac Therapy, unique in its kind in the post-surgical management of a complex case of massive abscess of scrotal integuments and cavernous bodies. The Vac-Therapy was born on the basis of the concept borrowed from the doctor Louis Argenta, a scholar of diabetic pathology and diabetic sores and from the bioengineer Michael Morykwas of negative pressure exercisable by an aspiration device. The negative pressure is a pressure lower than the normal atmospheric one, that is 760 mmHg. To obtain the negative pressure it is necessary to remove the gaseous molecules from the affected area (for example a wound) using a suction system. This technique, which involved the use of polyurethane foam and a mechanical vacuum, was called "vacuum-assisted closure (VAC) therapy system" and developed in 1995 with the first marketing after FAD approval. Until 2005, VAC therapy was the only one available on the market to provide suitable negative pressure therapy in the world. The fundamental substrate of Vac Therapy is polyurethane foam, a polymer with large holes (400-600 micrometers) as it ensures, while maintaining porosity, a uniform pressure distribution over the entire site of action. In addition, the volume of the foam undergoing a depressurized reduction determines 3 substantial phenomena: a) stretching of the cells, b) contraction of the wound from the margins to the center with facilitation of the closure of itself, c) total elimination of the fluids present on the site that may favor infections and healing delay. The inert dressing, positioned on the wound and connected to the aspiration source, exerts on it a localized and controlled negative pressure, such as to induce cellular proliferation. Dressings generally need to be replaced every 48 to 56 hours. In the presence of site infection the most frequent medication is recommended. Too long dressing time causes discomfort to the patient by incorporating the granulation tissue into the polyurethane foam.

#### Materials and Methods

On 2 July 2019 a 72-year-old diabetic and cardiopathic patient in poor general conditions came to our observation in emergency, for severe post-circumcision complications, in a feverish state, with severe tenderness of the entire genital region, bladder anuria from about 12 hours, with complete swelling of scrotal integuments and supra-pubic region, without signs of cutaneous fistulization, incarceration of the penis of which only the extremity of the glans was recognized. The laboratory framework laid down for mild neutrophilic leukocytosis, with no evidence of PCR and PCT modifications. He was immediately catheterized with RUA resolution and subjected to echocolor Doppler examination followed by extemporaneous integration with echocontrastographic survey after bolus administration of 2.4 ml of ecdedicated contrast that confirmed the diagnostic suspicion of a large abscess localized to the scrotal sac and the corpus cavernosum to peno-scrotal angle, where caverno-scrotal fistula was located with saving didymas. On admission the patient was subjected to combination antibiotic therapy with Cefazolin and Metronidazole. A few hours after the observation, the patient underwent an urgent scroto-tomy surgery with a complete toilet on the intrascrotal and suprapubic abscess caves, identification of incarcerated cavernous bodies and bilateral corporotomy, fistulectomy with subsequent toilet and a wide excision of cutaneous margins; finally two suprapubic and scrotal aspiration drains were positioned. In the postoperative period there was a stabilization of the symptoms but a progressive loss of substance from the surgical site and progressive necrosis of the scrotal suture margins, despite the meticulous dressings with hydrogen peroxide and chlorhexidine.

After 5 days it was decided to subject the patient to a new operation this time to remove the necrotic tissue, scarify the scrotal surgical bed and place the Vac-Therapy.

#### Results

The wound was healed using "Vac white foam Small" as a polyurethane foam-based dressing for the treatment of exposed noble structures and with the installation of "Vac Veraflo Medium" instrumentation to obtain negative pressure. Medications were followed twice weekly for 10 days, during which the pressurization device was temporarily deactivated, using only physiological saline and sterile gauze. On 19 July the patient presented a wound with a vital bed, absolutely free of signs of infection and / or contamination with correct granulation. Therefore the Vac Therapy was interrupted and it was decided to proceed with a third surgical intervention aimed at grafting the INTEGRA dermal matrix substitute and at discharge the following day. The patient checked at 90 days was in perfect clinical condition, with complete regeneration of the neoderm and realignment of the scrotal margins on the prosthetic graft which is no longer visible.

#### Conclusion

VAC is a non-invasive integrated therapeutic system that uses negative pressure, localized and controlled, continuous or intermittent to promote the wound healing process and is particularly effective in the treatment of complex wounds such as: burns, ulcers, diabetic lesions and abscess caves, guaranteeing them a correct asepsis, favoring an early juxtaposition of the margins and an early formation of the granulation tissue. Vac Therapy is contraindicated in the suspicion of cancer cells in the lesion and in the following cases: untreated osteomyelitis, non-enteric and unexplored fistulas, necrotic tissue with eschar. If until now the use of Vac Therapy was almost exclusive at orthopedic, abdominal surgical and dermatological level, our favorable experience on a complex case of scrotum-cavernous abscess allows us to propose the use of Vac Therapy also in urological and andrological surgery.

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## 5. #282: SINGLE-INSTITUTION EXPERIENCE WITH "PENILE PATCHES" IN PATIENTS WITH PEYRONIE'S DISEASE AND ERECTILE DYSFUNCTION

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#### Objective

Multiple guidelines endorse the use of surgery in the treatment of penile deformity as a result of Peyronie's disease. Penile prosthesis implantation is a treatment choice in patients with erectile dysfunction (ED) and concomitant penile curvature due to Peyronie's disease<sup>1</sup>. Residual curvature correction during inflatable penile prosthesis (IPP) implantation in patients with Peyronie's disease (PD) is common. The aim of this single-institute analysis was to compare surgical outcomes between hemostatic patches and pericardium patches in patients with Peyronie's diseases and ED managed with inflatable penile prosthesis (IPP) and plaque incision with grafting in case of persistent curve more than 30° after manual modelling.

#### Materials and Methods

From January 2015 to December 2018, 62 patients with Peyronie's diseases and ED received inflatable penile prosthesis implantation and tunical incision and patch graft for persistent curve more than 30° after manual modelling. Tunical defects were more than 2 cm and graft used were Permacol™ (Covidien) or hemopatches [TachoSil® (Takeda) or more recently Hemopatch (Baxter AG)]. All data were collected in a prospectively maintained database and retrospectively analysed.

#### Results

Hemopatches were used in 38 patients (Group A) while Permacol™ was used in 24 patients (Group B). Mean operative time

was significantly shorter in the group A ( $94.16 \pm 18.07$ ) than the group B ( $122.14 \pm 28.8$ ) [ $p10^\circ$  was present in 3 out of 38 patients of Group A and in 4 out of 24 patients of Group B ( $p=0.2878$ ). There were no complications due to material used or herniation of IPP through the tunical defect.

#### Discussions

A lot of patches are commonly used for surgical correction of Peyronie's disease (autologous dermis, tunica vaginalis, dura mater, fascia, saphenous vein, tunica albuginea, buccal mucosa, porcine intestinal submucosa, pericardium, TachoSil®, Hemopatch and synthetic material). The ideal patch should be traction-resistant, easy to suture and manipulate and flexible, although not to the extent that it allows aneurysmatic dilatation or interferes with the veno-occlusive function of the albuginea. The cost should also be reasonable<sup>2</sup>. Nowadays the ideal patch has yet to be determined. Permacol™ (Covidien) was commonly used for ventral hernia repair and abdominal wall reconstruction while TachoSil® and Hemopatch are commonly used for surgical haemostasis. In our experience the time of procedures with the use of hemopatches was significantly lower probably because it does not require to be suturing to the albuginea. With the use of Permacol we assisted to a more proportion of residual curvature even if it does not reach the statistical significance. Moreover in our experience hemopatch is better than tachosil in adherence to tunica albuginea and appear more stable than Tachosil that is easily fragmentable e it is not stable during the suturing of superficial penile layers. A limitation of this study was the low number of patients and the monocentric nature of the analysis.

#### Conclusion

In our experience hemopatches [in particular the Hemopatch (Baxter AG)] are better than the Permacol™ in management of patients with ED and Peyronies' disease. Despite this, nowadays, the final decision will depend on the surgeon's experience, the patient's preferences, economic considerations and the characteristics of the plaque.

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## 6. #142: PRELIMINARY RESULTS OF TREATMENT WITH AUTOLOGOUS PLATELET-RICH PLASMA AND POLYDEOXYRIBONUCLEOTIDE FOR MALE GENITAL LICHEN SCLEROSUS

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#### Objective

Genital lichen sclerosis (LS) is a chronic lymphocyte-mediated inflammatory dermatosis that has a predilection for the genital skin in both sexes. In males LS affect mainly the foreskin, the glans and the meatus. It can cause phimosis and symptoms such as burning and pain due to scarring, atrophy, erosions and edema. It is a relatively common disease but true incidence is unknown and likely underestimated. Current guidelines suggest treating patients with a continuous administration of topical corticosteroids. The aim of this study was to investigate the efficacy of a conservative treatment for LS with a combined use of autologous platelet-rich plasma (PRP) and polydeoxyribonucleotide (PDRN). Both PRP and PDRN are successfully use in many branches of medicine (trichology, dermatology, aesthetic medicine, etc.) thanks to their high tolerability and handling.

#### Materials and Methods

16 patients aged  $49.44 \pm 12.64$  affected by LS who fulfilled the following criteria were enrolled in the study:

- hystopathological diagnosis of LS resulting from 4 mm punch biopsy;
- negative past medical history for coagulopathies and autoimmune diseases;
- no treatments with anticoagulants, corticosteroids, nonsteroidal anti-inflammatory drugs (NSAIDs), disease-modifying anti-rheumatic drugs (DMARDs). The protocol included a total of 7 intra-dermal or submucosal injections to any affected areas, made with "micro-papule" technique:
- first cycle: 3 infiltrations of PRP (4 ml every 15 days);
- second cycle: 4 infiltrations of PDRN (1 vial of 5,625 mg / 3 ml every 7 days).

For the injections have been used needles for mesotherapy – intradermotherapy 27G x 4 mm and insulin syringes with Luer Lock. It was never necessary to use local anesthetics. After providing written informed consent, at blood bank Department of our hospital, the venous whole blood (about 20 ml every time) taken from the patient was centrifuged at 6000 rpm for 6 minutes. Infiltrations of PRP occurred within 30 minutes from blood processing. After each session, patients were verbally interviewed about their symptoms (eg, pain and discomfort) and lesions were evaluated by digital penoscopy. The patients remained under observation for a short time in our Andrology Unit to assess the presence of any complications or side effects.

#### Results

At three months after the seventh infiltration (ie the fourth PDRN injection), all patients exhibited clinical improvement in the size of their lesions. 11 of the 16 patients (68.75%) had become symptom-free and no longer needed to use steroids. 4 patients (25%) had a reduction of symptoms and continued to use topical steroid intermittently. Only one patient (6.25%) reported moderate pain and did not benefit from therapeutic protocol. There were no evidence of local adverse events (p.e. bleeding, infection or hematoma) during the clinical study.

## Discussions

The PRP infiltration is a simple, safe and immunologically biocompatible procedure. PRP works via the degranulation of the  $\alpha$ -granules in platelets, which contain synthesized and pre-packaged growth factors. PRP induces tissue building capacity thanks to platelet derived growth factor (PDGF) – isoforms A and BB, vascular endothelial growth factor (VEGF), transforming growth factor  $\beta$  (TGF- $\beta$ ), insulin like growth factor-1 (IGF-1). Moreover, PRP activates neoangiogenesis and improves blood flow and tissue oxygenation. PDRN, instead, is a drug belonging to the official Italian pharmacopoeia. It is indicated in the treatment of cutaneous and connective lesions associated with dystrophic and dystrophic-ulcerative pathologies. It is used in off-label ways for skin bioregeneration. PDRN, consisting of several deoxyribonucleotides joined together by phosphodiester bonds, reaches the phlogistic site with high tropism, interacting with elements such as platelets and fibronectin and defining the formation of molecular complexes capable of facilitating cell regeneration. However, the inducing action on the cell cycle seems to be associated with the ability of the active principle to activate alternative signal pathways, capable of supporting gene expression, optimizing DNA synthesis and the subsequent process of cell proliferation and tissue regeneration.

## Conclusion

Currently, steroids are the most used treatment but can cause side effects such as fibrosis and in some cases it is contraindicated, such as in diabetes. Use of PRP-PDRN integrated therapeutic protocol significantly improves the overall conditions in patients affected by LS with a significant reduction in lesions, inflammation and associated symptoms. Many research studies have been published on the use of PRP and PDRN for the treatment of LS. Currently, there are no clinical studies on the combined PRP-PDRN protocol to exploit the synergism of both infiltrative procedures. Further clinical trials are necessary to evaluate long-term results, as well as what could be the best protocol for the combined treatment of LS with PRP and PDRN.

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## 7. #280: ABSCESS OF PENILE'S CAVERNOSIS BODIES: ROLE OF THE "CEUS" IN DIAGNOSIS AND IN POST-OPERATIVE CONTROL OUR EXPERIENCE IN TWO CASES

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## Objective

The abscess of cavernous bodies is a rare urological problem. The literature review highlights only a few sporadic reports. The primary symptomatology is swelling, pain and fever. Most penile abscesses are anatomically localized in the cavernous body and are often secondary to intracavernous injections of drugs for erection, perineal and / or perianal abscesses, and trauma to the penis. Immunodeficiency and immunosuppression constitute predisposing factors. The gold standard treatment is early surgery and followed by medical therapy. Often, however, severe postoperative complications occur, such as: penile curvature and erectile deficit. The ecocolor doppler is today the first-level investigation in the study of penile pathology. The ultrasound study of the penis is performed using high frequency linear transducers with longitudinal and transverse scans on the ventral aspect of the shaft. Cavernous bodies in transverse scans appear as two relatively hypoechoic symmetrical structures with fine homogeneously distributed echoes; inside the corpora cavernosa it is possible to identify the cavernous arteries in the form of small roundish images with hyperechoic walls. The albuginea is recognizable as a hyperechogenic interface that envelops the corpora cavernosa and continues in the central part with the intercavernous septum, which presents itself with a hypo-anechoic band with posterior attenuation of the beam. The spongy body appears as a median and ventral oval structure with echogenicity similar to that of the cavernous body. In longitudinal scans the vessels appear as tubular structures running parallel to the probe. Basal ultrasound

does not always allow a precise identification of a possible abscess collection. In more advanced cases the abscesses can appear as hypoechoic collections, with irregular profiles with mobile echoes, located in the internal erectile bodies or between the connective sheaths. Such situations are often associated with swelling of the mucosa and subcutaneous tissue and with a marked hyperemia of the corpora cavernosa. The ecocontrastographic study underlines in physiological conditions a mild homogeneous and progressive impregnation of the cavernosal arteries, of the hilarine arteries and of the sinusoids of the cavernous tissue. The objective of this work of ours is to show the semiology and to propose the role of CEUS in the diagnosis and post-therapeutic follow-up in cases of abscesses of cavernous bodies.

#### Materials and Methods

Between June and August 2019 two cases of cavernous corpus abscess reached our observation of the PS. The first appeared as a very rare case of spontaneous abscess of the left cavernous body in a 49-year-old patient, in apparent good general condition, arrived in PS in a febrile state and with severe pain, due to marked swelling and pain in the penis and scrotum associated with the appearance of alkaline pyuria and gland-preputial and caverno-preputial multiple fistulas in the previous 24 h from clinical observation. The laboratory framework was positive for massive neutrophil leukocytosis and increase in PCR. The second case, a 72-year-old patient, diabetic and cardiopathic in poor general conditions, arrived in PS following severe post-circumcision complications, in a feverish state, bladder-like anuria for about 12 hours, with complete swelling of scrotal integuments and suprapubic region, without signs of cutaneous fistulization, incarceration of the penis of which only the extremity of the glans was recognized. The laboratory framework laid down for mild neutrophilic leukocytosis, with no evidence of PCR and PCT modifications. In both cases, ECD examinations were performed using a LA533 multi-frequency linear probe on Esaote My Lab Classic C device followed by extemporaneous integration with ecocontrastographic investigations following bolus administration of 2.4 ml of ecodedicated contrast medium (Sonovue-Bracco-Switzerland) followed by flush of SF 10 ml with real time acquisitions up to 6 minutes.

#### Results

In accordance with the data present in the literature, in the two cases we observed the basal ultrasound examination did not allow a precise identification of the abscess collection that appeared only in a slightly hypoechoic manner, therefore suspected but hardly stable for entity and characterization; however, it showed the fistulous hypoechoic directed to the glans towards the balano-preputial sulcus in the first case and the fistulously highly hypoechoic cavernous scrotal via contained in the dartos in the second case. At the evaluation after contrast injection CEUS in correspondence with the basal hypoechoic, in the two cases the suspected abscesses collections were on one hand characterized with certainty presenting themselves as areas of absent central perfusion delimited by irregular rims with discrete, early and non-fleeting peripheral enhancement, from another has allowed us to document the wider distribution and extent of the abscess compared to the baseline suspicion. The fistulous tract has been well documented in both cases after CEUS as a perfusion free tubuliform area. Patients were initially treated with combination antibiotics Cefazolin 2 g every 12 hours and Metronidazole 500 mg every 8 hours and subsequently after 24 hours they underwent exploratory surgeries with left corporotomy followed by toilet in the first case and scrototomy with toilet complete of the intrascrotal and suprapubic abscess caves, identification of incarcerated cavernous bodies and bilateral corporotomy with subsequent toilet. Postoperative controls at 30 days showed no post-surgical sequelae, showing a physiological mild homogeneous and progressive impregnation of the cavernous arteries, the helicine arteries and the sinusoids of the cavernous tissue.

#### Conclusion

The CEUS is a non-invasive method, "bed-side" executable, which in the cases presented, allowed to obtain a more precise assessment on the localization, characterization, staging of abscess of the corpora cavernosa, allowing the patient to be directed to the most appropriate therapy. The CEUS control in post-operative follow-up allowed to exclude possible sequelae or complications.

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## 8. #249: PENIS STRANGULATION CAUSED BY A STEEL RING: A CASE REPORT

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#### Objective

To describe a man with penis strangulation caused by a steel ring and its successful removal.

#### Materials and Methods

A 33 year-old man presented to our emergency department with a 3-hour history of a grossly swollen and painful

penis due to a stainless steel ring located at the base of the penis for erection enhancement during intercourse. After intercourse, he was unable to remove the ring and the penile pain and swelling progressively worsened. At presentation, the patient also complained of pain in his lower abdomen and hypoesthesia in his genitalia. He had no comorbidities and no history of mental illness or substance abuse. On examination, the patient was anxious and distressed. Abdominal bulging was absent, although guarding and tenderness were present in the lower abdomen. A 2.5-cm-diameter, 2-cm wide and 2-mm-thick ring was positioned tightly at the base of the penis. The incarcerated penile shaft was grossly edematous and bluish with areas of exudation, cool and diminished in sensation. The small diameter of the ring and edematous tissue made it impossible to pull out the ring from the shaft. Hence, the fire department was contacted to obtain assistance; after consultation with them, the decision was made for the fire personnel to remove the steel ring using their hydraulic cable cutter. After disinfection, 1% lidocaine was injected at the base of the patient's penis. The ring was sheared in two places and successfully removed without injury to skin and other tissue. After removal of the ring, circulation and skin color of the penis and scrotum were restored. At follow-up 2 weeks later, the edema had resolved and the skin had completely healed. Urination, skin sensation, and erectile function had returned to normal after 1 week. Urinalysis results were normal. On examination, a discontinuous circumferential scar was evident at the base of the penis.

#### Results

The hydraulic cable cutter avoided thermal injury and shortened removal time compared with other procedures described. The patient's recovery was uneventful, with erectile function restored after 1 week.

#### Discussions

Ring-shaped objects are placed on the penis often to enhance sexual performance and for autoerotic purposes or curiosity.(1,2). The ring hinders venous return and leads to swelling, followed by arterial and lymphatic blockage and ischemia distal to the ring (3, 4) Timely removal of the offending object is paramount for full recovery of circulatory and urinary functions and in most cases further management is unwarranted. Delay in removal can lead to penile necrosis, urethrocuteaneous fistula, and even septic shock and death (3, 4, 5, 6). Management depends on the type and size of the constricting object, time after incarceration, degree of injury, available instruments, and experience of the physicians (2). The literature describes four approaches for removal of the object: string technique, aspiration, cutting, and surgery (2, 5, 7, 8). Special implements are often needed, which are not always available in the emergency and urology departments (1, 3, 4, 9, 10). Indeed, management delay is typically caused by locating an appropriate tool (2). However, their use introduces the risk of thermal burn or mechanical damage to genitalia tissue. Furthermore, a protective device needs to be inserted between the edematous genitalia and the ring, which can increase pressure and pain (5). The Winter procedure can be attempted, but the surgery is lengthy and poses a risk of injury (2). We believe that ours is the second report of a hydraulic cable cutter being used to shear a constricting object. The cutter posed no risk of thermal injury and was capable of directional and power adjustments. We also did not need to insert a protective device between the ring and genitalia; thus, no ensuing injury occurred.

#### Conclusion

Genital incarceration is an urgent clinical situation requiring prompt treatment. However, suitable tools for removing the foreign object are not readily available in emergency and urology departments. Cooperation with other disciplines, even non-medical disciplines, can result in creative and timely measures for removal of the object.

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## 9. #293: A STRANGE CASE OF TRANSVERSE TESTICULAR ECTOPIA AND TESTICULAR FU-SION DUE TO IATROGENIC CAUSE

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#### Objective

Transverse testicular ectopia (TTE) is a rare anomaly in which both the testes descend through a single inguinal canal and lie in the same hemiscrotum or inguinal region. It is usually found incidentally in patients operated for inguinal hernia or undescended testicles. In the literature, less than 100 cases of TTE have been reported (1). Standard treatment of TTE is

mainly surgery, including inguinal hernia repair, transseptal orchiopexy, and the repair of congenital anomalies (2). In this case study, we report the case of a iatrogenic transverse testicular ectopia in a 16 years-old man who had previously undergone left orchiopexy for testicular torsion. After the procedure the patient complained the absence of the left testis and abnormal enlargement in the right hemiscrotum.

#### Materials and Methods

A 16 years-old male patient was admitted to our hospital complaining a left empty hemiscrotum and an enlarged right testis. On the physical examination it was noted the absence of the left testis whereas the right testis was enlarged, with normal texture and without sign of inflammation. The urethral meatus was in normal localization, and there were no findings related to the hernia in both inguinal canals. Ultrasound scan revealed the presence of both testicles, apparently fused together, located in the right hemiscrotum; left hemiscrotum was empty. Surgical exploration was planned. Through a transverse scrotal incision right hemiscrotum was entered; both testes were located in the right side and partially fused together. The right vas and vascular elements had the conventional course from the right inguinal ring through the right hemiscrotum to the testis; the left cord originated from the ipsilateral inguinal ring going through the scrotal septum to reach the left testis. The testicles were easily separated each other avoiding any lesion to the tunica albuginea; hence the scrotal septum was partially opened in order to move the left testicle to the proper side. Bilateral orchiopexy was then performed by using an absorbable suture joining the caudal pole of the testis to the ipsilateral pouch of the scrotum and the septum rebuilt.

#### Results

Post-operative course was uneventful and the patient was discharged the day after the procedure. Follow-up with ultrasound at 6 months after surgery showed both testes properly placed in the scrotum with normal homogeneous granular echotexture and vascularity.

#### Discussions

TTE was first reported by von Lenhossek in 1886 (3). The various theories to suggest the etiopathogenesis are: dysfunction of the genitofemoral nerve, true crossover of the testis, both the testis arising from the same genital ridge or both lying in the same processus vaginalis before descent. Management is orchidopexy, either trans-septal or extraperitoneal transposition orchidopexy (4). Laparoscopy better delineates the anatomy and enables us to see the crossing over of the spermatic cord towards the opposite side. It helps assess the testis and its side, vas, and vessels for length. The management depends upon the length of the vas and vessels. If length is severely inadequate, both the testes are fixed in the same hemiscrotum and if the length is adequate, then transseptal orchidopexy is recommended. In cases, where there is inadequate or just adequate length, transseptal contralateral orchidopexy can be done (5). In the case reported, the transverse testicular ectopia was not due to a congenital abnormal migration of the left testis through the contralateral inguinal canal, but it resulted from the unfortunate consequences of the surgical procedure the patient had been submitted some months earlier. Scrotal orchiopexy had been performed for left testicular torsion; it is usually a simple procedure with few surgical steps. In this case, the surgeon probably accidentally damaged the scrotal septum so that the left testis could migrate contralaterally then adhering to the right testis in a diminished space available. Our surgical procedure was simple and effective especially if you consider that the spermatic cords in this case originated from the ipsilateral inguinal ring as usual and did not have a common origin from one side only.

#### Conclusion

The transverse testicular ectopia should be considered as an extremely rare complication of scrotal surgery; the integrity of the scrotal septum should be respected in order to avoid this occurrence.

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## 10. #193: TREATMENT OF 1258 BULBAR URETHRAL STRICTURES USING GRAFT URETHROPLASTIES: MULTIVARIABLE STATISTICAL ANALYSIS

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#### Objective

We investigated the success rate of different surgical grafting techniques for bulbar stricture repair. Our

aim is to retrospectively evaluate a large series analyzing the success rates and the independent predictive factors for failure.

#### Discussions

Success rates of the analyzed techniques do not show significant differences neither at 12 nor at 60 months. This result is in agreement with the available data, currently no specific technique is superior. TTPreserving+ Ventral grafting offers inferior results. However we emphasize that the choice of the technique depends on the stricture characteristics. Dorsal or Ventral grafting can be used for non sub-obliterative strictures where the remaining urethral lumen could be adequately augmented by using a single graft. Otherwise double Dorsal+ Ventral grafting or dorsal TTPreserving+ Ventral grafting are necessary for sub-obliterative or obliterative cases. Stricture length has proved to be an independent predictor of failure. Two other predictive factors have been identified: patient age and the post-operative voiding flow ( $Q_{max} < 13 \text{ mL/sec}$ ) that could be useful during clinical follow-up. A significant difference in terms of success among those who had never undergone any treatment compared to previously treated patients was recorded (95.3% vs 83.1%). Considering that, the clinical management should lead to earlier surgical indications instead of periodic dilations or repeated urethrotomies. MB has been confirmed as gold standard tissue. Patients must be followed for a minimum period of 5 years.

#### Conclusion

Grafting techniques for bulbar strictures have shown a high success rate at medium-long followup. Predictive factors for failure are age, stricture length and previous treatments. BM graft showed the better results. Long followup is mandatory.

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## 11. #180: COMBINED ASSESSMENT OF MAIN OUTCOMES OF PARTIAL OR TOTAL ADRENALECTOMY FOR FUNCTIONING ADRENAL MASSES: A NOVEL TRIFECTA

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#### Objective

There is lack of validated tools to evaluate surgical and functional outcomes of partial (PA) and total adrenalectomy (TA) for unilateral benign disease. The aim of this study was to assess the impact of a novel trifecta for the evaluation of outcomes of patients with a solitary, functioning adrenal mass, treated with either minimally-invasive PA (MIPA) or TA (MITA) at four different institutions.

#### Materials and Methods

From March 2011 to October 2019, we analyzed a multicentric dataset of 109 consecutive patients who underwent MIPA (n=32) or MITA (N=77) for unilateral Conn's syndrome (n=92) or pheochromocytoma (n=17). Trifecta was defined as "no clinical symptoms at 1 year follow-up"; "no major complications (Clavien 3-5)"; "no use of any specific drug treatment at 1-year follow-up". Baseline demographic, perioperative and functional data were collected and reported. Trifecta outcomes were assessed for MIPA and MITA. A descriptive analysis was used.

#### Results

Baseline, demographic and perioperative data are reported in Table 1. At a mean follow-up of 42,4 months (IQR 30-53) overall trifecta outcomes were achieved by 59 patients (54.1%). The trifecta rates for MIPA and TAPA were 65.6% and 49.4, respectively (p=0.12) (Fig.1). No perioperative complications were observed in the PA group while the perioperative complications rate in the TA series was 13%.

#### Conclusion

We described a novel and reproducible clinical tool as an indicator of both surgical quality and clinical outcomes of minimally-invasive adrenalectomy for benign disease. In experienced centres, trifecta outcomes may be achieved approximately by half of the patients independently of the surgical approach chosen. In our series the quest for trifecta seems to be better accomplished by an adrenal-sparing approach, which is likely to become an established treatment in the urological armamentarium.

# Video 5 - Video Rene

## 1. #174: PUSHING THE LIMITS OF ROBOT-ASSISTED PARTIAL NEPHRECTOMY: OFF-CLAMP APPROACH FOR BILATERAL, HILAR AND TOTALLY ENDOPHYTIC RENAL MASSES

Mariaconsiglia Ferriero<sup>1</sup>, Riccardo Mastroianni<sup>1</sup>, Gabriele Tuderti<sup>1</sup>, Umberto Anceschi<sup>1</sup>, Alfredo Bove<sup>1</sup>, Aldo Brassetti<sup>1</sup>, Salvatore Guaglianone<sup>1</sup>, Michele Gallucci<sup>1</sup>, Giuseppe Simone<sup>1</sup>

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The video highlights surgical steps of purely off-clamp robotic partial nephrectomy in different scenarios: docking and patient positioning, surgical equipment, three consecutive videos of bilateral tumors, purely hilar tumor and totally endophytic renal tumors. The first case was a patients with synchronous bilateral tumors (cT2 on right side and cT1b on right side). A single session bilateral robotic partial nephrectomy was performed (right side shown). The second case was a 3.3 cm purely hilar tumor in touch with main renal artery and renal pelvis. The last case was a 3.3 cm totally endohytic renal tumor with baseline stage 3b chronic kidney disease who underwent preoperative transarterial ICG marking and subsequent off-clamp robotic partial nephrectomy. Purely off clamp robotic partial nephrectomy is a challenging technique. Its feasibility in challenging surgical scenarios is demonstrated. Despite the potential functional benefits in patients with baseline impairment of renal function, this technique requires advanced surgical skills, therefore selective referral to high volume centers should be considered.

## 2. #171: PURELY OFF-CLAMP ROBOT-ASSISTED PARTIAL NEPHRECTOMY FOR TOTALLY ENDOPHYTIC RENAL TUMORS: MID-TERM OUTCOMES FROM A SINGLE-CENTER SERIES

Gabriele Tuderti<sup>1</sup>, Umberto Anceschi<sup>1</sup>, Simone D'Annunzio<sup>2</sup>, Mariaconsiglia Ferriero<sup>1</sup>, Alfredo Bove<sup>1</sup>, Aldo Brassetti<sup>1</sup>, Manuela Costantini<sup>1</sup>, Salvatore Guaglianone<sup>1</sup>, Michele Gallucci<sup>3</sup>, Giuseppe Simone<sup>1</sup>

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The case of a 73-yr old male with a 3.3cm endophytic left renal tumor was reported. Surgical steps were highlighted, focusing on identification of the mass and margins scoring, simultaneous use of two suction devices combining irrigation and suction to maintain a bloodless and clear operative field, enucleative strategy and finally a selective renorrhaphy to avoid any unintentional injury to hilar branches of main vessels. Potential use of near infrared fluorescence was showed, including intravenous injection to ensure maximal preservation of healthy and functioning renal parenchyma and preoperative transarterial delivery to optimize tumor identification and resection strategy. Baseline, perioperative, oncologic and functional data were reported.

## 3. #172: TRANSARTERIAL ICG DELIVERY BEFORE PURELY OFF-CLAMP ROBOT-ASSISTED PARTIAL NEPHRECTOMY FOR TOTALLY ENDOPHYTIC RENAL TUMORS: TECHNIQUE AND OUTCOMES

Gabriele Tuderti<sup>1</sup>, Riccardo Mastroianni<sup>1</sup>, Umberto Anceschi<sup>1</sup>, Simone D'Annunzio<sup>2</sup>, Mariaconsiglia Ferriero<sup>1</sup>, Alfredo Bove<sup>1</sup>, Aldo Brassetti<sup>1</sup>, Manuela Costantini<sup>1</sup>, Salvatore Guaglianone<sup>1</sup>, Michele Gallucci<sup>3</sup>, Giuseppe Simone<sup>1</sup>

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In this video we present two cases of ICG- guided off-clamp RPN. The first one is a 54-yr old female with a 3-cm endophytic

"8 shaped" right renal tumor. The second is a 64-yr old male with a 2.5 cm endophytic left renal tumor. Between October 2017 and March 2019, patients with totally endophytic renal masses were scheduled for this procedure. Baseline, perioperative, pathologic, oncologic and functional follow-up data were prospectively collected.

#### 4. #136: 3D RETROPERITONEAL LAPAROSCOPIC PARTIAL NEPHRECTOMY FOR COMPLEX RENAL TUMORS

Paolo Parma<sup>1</sup>, Mattia Nidini<sup>1</sup>, Alessandro Samuelli<sup>1</sup>, Livio Cappellaro<sup>1</sup>, Vincenzo Galletta<sup>1</sup>, Stefano Guatelli<sup>1</sup>, Francesco Croce<sup>1</sup>, Elisabetta Deluise<sup>1</sup>, Marco Luciano<sup>1</sup>, Bruno Dall'Oglio<sup>1</sup>

<sup>1</sup> Ospedale Carlo Poma Mantova (Mantova)

In the video we show 3 cases of partial nephrectomy for complex renal masses (PADUA score 10-11) we availed the retroperitoneal approach using 3 D laparoscopic technique. First case: 63 years old obese male with a mass of 6 cm at the upper pole of the right kidney. After clamping two renal arteries, we proceed to the enucleation of the neoformation. Renorrhaphy is performed with a double layers suture: a continuous 2/0 polygactin suture of the tumor bed and subsequent unclamping of the renal artery and interrupted sutures of the renal parenchyma (warm ischemia 15 minutes). Second case: 72 years old female with a 4,5 cm tumor at the third medium-superior of the right kidney that reaches both renal sinus and superior caliceal group. We performed an enucleoresection with opening of the calix. Renorrhaphy is performed with a double layer suture with a running sliding-clip suture (warm ischemia time 18 minutes). Third case: 64 years old male with a tumor of 6,5 at the lower pole of the left kidney (PADUA score 10). The patient is affected by chronic renal failure We opt for a partial nephrectomy with a selective clamping. Hemostasis is performed with two continuous sutures of the tumor bed and a pre rolled tachosil patch.

#### 5. #150: ECCEZIONALE CASO DI TRATTAMENTO CHIRURGICO ROBOT - ASSITITO IN UN PAZIENTE CON DIAGNOSI DI TUMORE ALLA PROSTATA ASSOCIATO A TUMORE RENALE SINCRONO BILATERALE (DOPPIO AL RENE DI SINISTRA E SINGOLO AL RENE DI DESTRA)

Alessandro Izzo<sup>1</sup>, Giovanni Grimaldi<sup>1</sup>, Giuseppe Quarto<sup>1</sup>, Raffaele Muscariello<sup>1</sup>, Luigi Castaldo<sup>1</sup>, Martina Perra<sup>1</sup>, Dario Franzese<sup>1</sup>, Sisto Perdonà<sup>1</sup>

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Riportiamo il recente caso di un uomo di 73 anni con diagnosi di adenocarcinoma prostatico GS 8 (4+4), PSA 8.7 ng/mL che, in corso degli esami di stadiazione (TC e scintigrafia ossea total body), ha avuto la diagnosi incidentale di tre tumori renali sincroni (due a sinistra – RENAL SCORE 6p e 4 p; ed uno a destra – RENAL SCORE 5a).

Tecnica chirurgica utilizzata: Primo tempo: preventivo posizionamento dei trocar robotici per i diversi interventi e prostatectomia radicale (RAPN) associata a linfadenectomia estesa (patologia ad alto rischio). Il secondo tempo: enucleoresezione renale robot assistita (RAPN) sinistra "clampless" di entrambe le lesioni, che come illustrato dalla TC nel video risultavano essere contigue. Il terzo tempo: RAPN destra, con paziente in decubito laterale sinistro. Il tempo di console è risultato essere, rispettivamente: 54' per la RAPN e per la Linfadenectomia estesa. 50' per la duplice RAPN di sinistra 36' per la RAPN di destra. Le perdite ematiche complessive: 220 cc I giorni di degenza: 3 Il tempo di cateterizzazione: 3 giorni.

Dati patologici:

RAPN: pT3s R1 pN0, Adenocarcinoma GS7 (4+3).

RAPN destra: carcinoma renale a cellule chiare grado 2.

RAPN sinistra: carcinoma a cellule renali papillare grado 2 + carcinoma renale a cellule chiare grado 2.

#### 6. #310: CLAMPLESS LAPAROSCOPIC PARTIAL NEPHRECTOMY FOR HILAR COMPLEX TUMORS

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Nephron sparing surgery is now reference standard for many T1 renal tumors. "Zero ischemia" partial nephrectomy allows to eliminate ischemia during nephron sparing surgery. It is possible to realize a clampless LPN also for the treatment of hilar tumors. The video shows 3 cases of complex renal tumors. The first case shows a transperitoneal clampless left PN for hilar tumor. Hilar vessels are prepared in event that bulldog clamping may subsequently be needed. Intraoperative laparoscopic ultrasound is performed to identify tumor borders. To induce hypotension, the doses of inhalational isoflurane is increased. The renal lesion is excised using Ligasure. Calyceal suture was performed with Monocryl. Renal parenchyma was repaired with Vicryl™ sutures arrested with absorbable clips. Hemopatch and Floseal were applied to resection bed. The second case is represented by a right hilar tumor; Padua score is 9h and C index 1.4. The renal artery and vein are isolated on vessel loop. We proceed with resection of tumor using Ligasure. The third tumor is a left hilar tumor with Padua score is 10h, C index 0.4; renal artery is isolated on vessel loop. In this case we proceed with selective clamping of tumor artery during resection of the lesion. After removing bulldog

clamp, renorrhaphy is completed.

## 7. #274: NEFRECTOMIA PARZIALE LAPAROSCOPIA TRANSPERITONEALE 3D PER NEOPLASIE RENALI COMPLESSE

Paolo Parma<sup>1</sup>, Mattia Nidini<sup>1</sup>, Livio Cappellaro<sup>1</sup>, Alessandro Samuelli<sup>1</sup>, Stefano Guatelli<sup>1</sup>, Elisabetta De Luise<sup>1</sup>, Vincenzo Galletta<sup>1</sup>, Marco Luciano<sup>1</sup>, Francesco Croce<sup>1</sup>, Bruno Dall'Oglio<sup>1</sup>

<sup>1</sup> Ospedale Carlo Poma, Urologia (Mantova)

In questo video vogliamo esporre il nostro approccio chirurgico abituale per le neoplasie renali T1b complesse. Riteniamo infatti che la tecnica laparoscopica transperitoneale tridimensionale, possa essere un approccio standard per l'aggressione di masse renali voluminose, localizzate soprattutto sulla faccia anteriore e al polo superiore dell'organo. Il video si compone di 2 casi clinici similari:

Caso 1: una Paziente di 37 anni normopeso che non presentava nessuna comorbidità di rilievo, ha avuto una diagnosi accidentale TC durante ricovero in ambiente internistico per polmonite, di neoformazione allocata al polo superiore del rene destro delle dimensioni di 71×46 cm, in stretta contiguità alla faccia inferiore del surrene omolaterale.

Caso 2: una Paziente di 66 anni obesa e con lievi comorbidità, ha avuto una diagnosi accidentale ecografica (successivamente approfondita con indagine TC) di neoformazione renale allocata alla faccia anteriore del rene sinistro, sul terzo medio-superiore verso il labbro mediale, del diametro di 3,9 cm.

Secondo la nostra esperienza, l'approccio chirurgico laparoscopico tridimensionale transperitoneale, risulta ideale nella gestione delle neoformazioni renali (fino a T1b) localizzate alla faccia anteriore del rene, di natura anche complessa e parzialmente endofitica. Tale evidenza corrobora inoltre le indicazioni delle linee guida EAU a tal riguardo.

## 8. #175: ICG-GUIDED ROBOTIC-ASSISTED PARTIAL ADRENALECTOMY

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We present a case of a 54-year old female patient with a 1 cm left adrenal aldosterone-secreting lesion. Patient was symptomatic and required hypotensive treatment. Serum aldosterone levels were increased. Patient was placed in extended flank position and side docking. A transperitoneal five-port access was performed using a 30° scope. Once the adrenal gland was identified, under NIFI, the adrenal nodule appeared hyperintense compared to the adrenal parenchyma. The lesion was progressively mobilized following the pseudocapsule plane. A blunt and sharp dissection using monopolar scissors was employed to maximize adrenal parenchyma preservation. Blood pressure was carefully monitored intraoperatively to ensure hemodynamic stability during the procedure. The dissection was carried out without any isolation of adrenal vessels, in order to avoid accident or injury to adrenal vessels. The remnant adrenal margins were approximated with a sliding-clip running suture (3/0 Monocryl).

ICG-guided RPA is a safe and feasible procedure, providing excellent functional outcomes. The real time feed-back of ICG technology is best suited for small lesions to improve visualization of resection margins and to minimize unintended resection of healthy parenchyma.

# indice degli AUTORI degli abstracts qui pubblicati

Cognome		n. Abs	#	sessione	
Adesso	M.	10.	#307	Comun. 4 -	Tutto Rene
Adesso	M.	11.	#306	Comun. 4 -	Tutto Rene
Adesso	M.	9.	#308	Comun. 5 -	Ca Prostatico: Diagnostica E Terapia
Al Salhi	Y.	1.	#167:	Comun. 3	Bladder Destiny
Albanese	L.	10.	#262:	Comun. 2	Urolitiasi Ed Incontinenza Urinaria
Albanese	L.	2.	#266	Comun. 3	Bladder Destiny
Albanese	L.	5.	#264	Comun. 3	Bladder Destiny
Albanese	L.	3.	#267	Comun. 5 -	Ca Prostatico: Diagnostica E Terapia
Albanese	L.	4.	#263	Comun. 6 -	High Technology IPB
Altavilla	A.	16.	#192	Comun. 5 -	Ca Prostatico: Diagnostica E Terapia
Altieri	V.	3.	#149	Video 2 -	Chirurgia Di Precisione
Amparore	D.	7.	#182	Comun. 4 -	Tutto Rene
Aneschi	U.	2	#173	Video 1	Ricostruire Dentro: La Vescica
Aneschi	U.	1.	#164	Video 1	Ricostruire Dentro: La Vescica
Aneschi	U.	8.	#178	Comun. 1	LUTS E IPB
Aneschi	U.	1.	#167:	Comun. 3	Bladder Destiny
Aneschi	U.	6.	#165	Video 2 -	Chirurgia Di Precisione
Aneschi	U.	4.	#161	Comun. 4 -	Tutto Rene
Aneschi	U.	5.	#160	Comun. 4 -	Tutto Rene
Aneschi	U.	7.	#182	Comun. 4 -	Tutto Rene
Aneschi	U.	8.	#183	Comun. 4 -	Tutto Rene
Aneschi	U.	1.	#176	Video 3 -	Chirurgia Prostatica "High Level"
Aneschi	U.	8.	#163	Comun. 5 -	Ca Prostatico: Diagnostica E Terapia
Aneschi	U.	10.	#177	Comun. 5 -	Ca Prostatico: Diagnostica E Terapia
Aneschi	U.	11.	#180	Comun. 7 -	Andronews
Aneschi	U.	1.	#174	Video 5 -	Video Rene
Aneschi	U.	2.	#171	Video 5 -	Video Rene
Aneschi	U.	3.	#172	Video 5 -	Video Rene
Aneschi	U.	9.	#175	Video 5 -	Video Rene
Andrea	R.	6.	#217	Video 1	Ricostruire Dentro: La Vescica
Angerri	O.	2.	#239:	Comun. 2	Urolitiasi Ed Incontinenza Urinaria
Armas Phan	M.	2.	#239:	Comun. 2	Urolitiasi Ed Incontinenza Urinaria
Autorino	R.	7.	#182	Comun. 4 -	Tutto Rene
Azzolini	N.	4.	#220	Comun. 1	LUTS E IPB
Bada	M.	1.	#225	Comun. 4 -	Tutto Rene
Bada	M.	7.	#304	Comun. 5 -	Ca Prostatico: Diagnostica E Terapia
Bada	M.	12.	#223	Comun. 5 -	Ca Prostatico: Diagnostica E Terapia

Cognome		n. Abs	#	sessione	
Bada	M.	13.	#224	Comun. 7 -	AndroneWS
Badenchini	F.	8.	#163	Comun. 5 -	Ca Prostatico: Diagnostica E Terapia
Baincolini	R.	4.	#259	Video 4 -	Calcolosi e Andrologia
Baio	R.	10.	#307	Comun. 4 -	Tutto Rene
Baio	R.	11.	#306	Comun. 4 -	Tutto Rene
Baio	R.	9.	#308	Comun. 5 -	Ca Prostatico: Diagnostica E Terapia
Baio	R.	7.	#310	Video 5 -	Video Rene
Barbieri	A.	4.	#220	Comun. 1	LUTS E IPB
Bardelli	I.	6.	#248	Comun. 4 -	Tutto Rene
Bardelli	I.	13.	#305	Comun. 5 -	Ca Prostatico: Diagnostica E Terapia
Bardelli	I.	8.	#249	Comun. 7 -	AndroneWS
Bardelli	I.	9.	#293	Comun. 7 -	AndroneWS
Bassi	S.	5.	#226	Comun. 6 -	High Technology IPB
Batagello	C.	2.	#239:	Comun. 2	Urolitiasi Ed Incontinenza Urinaria
Battaglia	G.	3.	#205	Comun. 3	Bladder Destiny
Batter	T.	2.	#239:	Comun. 2	Urolitiasi Ed Incontinenza Urinaria
Bellangino	M.	5.	#226	Comun. 6 -	High Technology IPB
Benecchi	L.	5.	#160	Comun. 4 -	Tutto Rene
Bergamaschi	F.	6.	#217	Video 1	Ricostruire Dentro: La Vescica
Bergamaschi	F.	7.	#219	Video 1	Ricostruire Dentro: La Vescica
Beverini	M.	2.	#216	Comun. 1	LUTS E IPB
Beverini	M.	4.	#222	Video 2 -	Chirurgia Di Precisione
Beverini	M.	9.	#221	Comun. 4 -	Tutto Rene
Biancolini	R.	5.	#258	Video 4 -	Calcolosi e Andrologia
Biferi	D.	7.	#219	Video 1	Ricostruire Dentro: La Vescica
Bocchialini	T.	4.	#220	Comun. 1	LUTS E IPB
Boezio	F.	14.	#313:	Comun. 2	Urolitiasi Ed Incontinenza Urinaria
Bonfante	G.	7.	#219	Video 1	Ricostruire Dentro: La Vescica
Bonini	F.	2.	#216	Comun. 1	LUTS E IPB
Bonini	F.	9.	#221	Comun. 4 -	Tutto Rene
Borgatti	F.	7.	#219	Video 1	Ricostruire Dentro: La Vescica
Bottalico	M.	6.	#277	Video 3 -	Chirurgia Prostatica "High Level"
Bottalico	M.	8.	#279	Comun. 6 -	High Technology IPB
Bottalico	M.	7.	#297:	Comun. 2	Urolitiasi Ed Incontinenza Urinaria
Bove	A.	2	#173	Video 1	Ricostruire Dentro: La Vescica
Bove	A.	8.	#178	Comun. 1	LUTS E IPB
Bove	A.	1.	#167:	Comun. 3	Bladder Destiny
Bove	A.	6.	#165	Video 2 -	Chirurgia Di Precisione
Bove	A.	4.	#161	Comun. 4 -	Tutto Rene
Bove	A.	5.	#160	Comun. 4 -	Tutto Rene
Bove	A.	8.	#183	Comun. 4 -	Tutto Rene
Bove	A.	1.	#176	Video 3 -	Chirurgia Prostatica "High Level"
Bove	A.	10.	#177	Comun. 5 -	Ca Prostatico: Diagnostica E Terapia
Bove	P.	10.	#193	Comun. 7 -	AndroneWS
Bove	A.	11.	#180	Comun. 7 -	AndroneWS
Bove	A.	1.	#174	Video 5 -	Video Rene
Bove	A.	2.	#171	Video 5 -	Video Rene
Bove	A.	3.	#172	Video 5 -	Video Rene
Bove	A.	9.	#175	Video 5 -	Video Rene

Cognome		n. Abs	#	sessione	
Braschetti	A.	2	#173	Video 1	Ricostruire Dentro: La Vescica
Braschetti	A.	1.	#164	Video 1	Ricostruire Dentro: La Vescica
Braschetti	A.	8.	#178	Comun. 1	LUTS E IPB
Braschetti	A.	1.	#167:	Comun. 3	Bladder Destiny
Braschetti	A.	6.	#165	Video 2 -	Chirurgia Di Precisione
Braschetti	A.	4.	#161	Comun. 4 -	Tutto Rene
Braschetti	A.	5.	#160	Comun. 4 -	Tutto Rene
Braschetti	A.	7.	#182	Comun. 4 -	Tutto Rene
Braschetti	A.	8.	#183	Comun. 4 -	Tutto Rene
Braschetti	A.	1.	#176	Video 3 -	Chirurgia Prostatica "High Level"
Braschetti	A.	8.	#163	Comun. 5 -	Ca Prostatico: Diagnostica E Terapia
Braschetti	A.	10.	#177	Comun. 5 -	Ca Prostatico: Diagnostica E Terapia
Braschetti	A.	11.	#180	Comun. 7 -	Andronews
Braschetti	A.	1.	#174	Video 5 -	Video Rene
Braschetti	A.	2.	#171	Video 5 -	Video Rene
Braschetti	A.	3.	#172	Video 5 -	Video Rene
Braschetti	A.	9.	#175	Video 5 -	Video Rene
Brighi	N.	16.	#192	Comun. 5 -	Ca Prostatico: Diagnostica E Terapia
Brizzi	A.	1.	#265:	Comun. 7 -	Andronews
Brusasco	C.	2.	#216	Comun. 1	LUTS E IPB
Brusasco	C.	9.	#221	Comun. 4 -	Tutto Rene
Cacciotti	J.	2.	#170	Comun. 4 -	Tutto Rene
Cammalleri	L.	2.	#216	Comun. 1	LUTS E IPB
Campitelli	A.	9.	#308	Comun. 5 -	Ca Prostatico: Diagnostica E Terapia
Campobasso	D.	4.	#220	Comun. 1	LUTS E IPB
Campodonico	F.	2.	#216	Comun. 1	LUTS E IPB
Campodonico	F.	4.	#222	Video 2 -	Chirurgia Di Precisione
Campodonico	F.	9.	#221	Comun. 4 -	Tutto Rene
Capitano	U.	7.	#182	Comun. 4 -	Tutto Rene
Capparelli	G.	3.	#301	Comun. 4 -	Tutto Rene
Cappellaro	L.	9.	#139	Video 3 -	Chirurgia Prostatica "High Level"
Cappellaro	L.	8.	#274	Video 5 -	Video Rene
Cappellaro	L.	4.	#136	Video 5 -	Video Rene
Capponi	G.	2.	#216	Comun. 1	LUTS E IPB
Capuano	S.	7.	#280	Comun. 7 -	Andronews
Carbone	A.	1.	#167:	Comun. 3	Bladder Destiny
Carbone	A.	2.	#170	Comun. 4 -	Tutto Rene
Cardone	P.	5.	#282	Comun. 7 -	Andronews
Carini	M.	7.	#182	Comun. 4 -	Tutto Rene
Caroli	P.	5.	#214	Comun. 5 -	Ca Prostatico: Diagnostica E Terapia
Carrara	A.	11.	#180	Comun. 7 -	Andronews
Carrino	M.	5.	#143	Comun. 1	LUTS E IPB
Carrino	M.	9.	#276	Comun. 1	LUTS E IPB
Carrino	M.	6.	#195	Video 4 -	Calcolosi e Andrologia
Carrino	M.	3.	#189	Comun. 7 -	Andronews
Carrino	M.	5.	#282	Comun. 7 -	Andronews
Carrino	M.	6.	#142	Comun. 7 -	Andronews
Cascella	M.	15.	#152	Comun. 5 -	Ca Prostatico: Diagnostica E Terapia
Castaldo	L.	3.	#158	Video 1	Ricostruire Dentro: La Vescica
Castaldo	L.	4.	#153	Comun. 3	Bladder Destiny

Cognome		n. Abs	#	sessione	
Castaldo	L.	1.	#157	Video 2 -	Chirurgia Di Precisione
Castaldo	L.	15.	#152	Comun. 5 -	Ca Prostatico: Diagnostica E Terapia
Castaldo	L.	5.	#150	Video 5 -	Video Rene
Catastini	M.	6.	#248	Comun. 4 -	Tutto Rene
Catastini	M.	13.	#305	Comun. 5 -	Ca Prostatico: Diagnostica E Terapia
Catastini	M.	8.	#249	Comun. 7 -	Andronews
Catastini	M.	9.	#293	Comun. 7 -	Andronews
Cecchi	M.	6.	#248	Comun. 4 -	Tutto Rene
Cecchi	M.	13.	#305	Comun. 5 -	Ca Prostatico: Diagnostica E Terapia
Cecchi	M.	8.	#249	Comun. 7 -	Andronews
Cecchi	M.	9.	#293	Comun. 7 -	Andronews
Celia	A.	1.	#225	Comun. 4 -	Tutto Rene
Celia	A.	12.	#223	Comun. 5 -	Ca Prostatico: Diagnostica E Terapia
Celia	A.	11.	#180	Comun. 7 -	Andronews
Celia	A.	13.	#224	Comun. 7 -	Andronews
Celli	M.	5.	#214	Comun. 5 -	Ca Prostatico: Diagnostica E Terapia
Cerasi	D.	4.	#220	Comun. 1	LUTS E IPB
Ceresoli	F.	5.	#226	Comun. 6 -	High Technology IPB
Chi	T.	2.	#239:	Comun. 2	Urolitiasi Ed Incontinenza Urinaria
Chiancone	F.	5.	#143	Comun. 1	LUTS E IPB
Chiancone	F.	9.	#276	Comun. 1	LUTS E IPB
Chiancone	F.	3.	#205	Comun. 3	Bladder Destiny
Chiancone	F.	3.	#149	Video 2 -	Chirurgia Di Precisione
Chiancone	F.	13.	#156	Comun. 4 -	Tutto Rene
Chiancone	F.	17.	#204	Comun. 5 -	Ca Prostatico: Diagnostica E Terapia
Chiancone	F.	6.	#195	Video 4 -	Calcolosi e Andrologia
Chiancone	F.	3.	#189	Comun. 7 -	Andronews
Chiancone	F.	5.	#282	Comun. 7 -	Andronews
Chiancone	F.	6.	#142	Comun. 7 -	Andronews
Cimino	S.	3.	#186:	Comun. 2	Urolitiasi Ed Incontinenza Urinaria
Coletta	A.	7.	#280	Comun. 7 -	Andronews
Conteduca	V.	16.	#192	Comun. 5 -	Ca Prostatico: Diagnostica E Terapia
Costantini	M.	2.	#170	Comun. 4 -	Tutto Rene
Costantini	M.	4.	#161	Comun. 4 -	Tutto Rene
Costantini	M.	5.	#160	Comun. 4 -	Tutto Rene
Costantini	M.	8.	#183	Comun. 4 -	Tutto Rene
Costantini	M.	5.	#214	Comun. 5 -	Ca Prostatico: Diagnostica E Terapia
Costantini	M.	11.	#180	Comun. 7 -	Andronews
Costantini	M.	2.	#171	Video 5 -	Video Rene
Costantini	M.	3.	#172	Video 5 -	Video Rene
Cracco	C.	2.	#239:	Comun. 2	Urolitiasi Ed Incontinenza Urinaria
Croce	F.	9.	#139	Video 3 -	Chirurgia Prostatica "High Level"
Croce	F.	8.	#274	Video 5 -	Video Rene
Croce	F.	4.	#136	Video 5 -	Video Rene
D'Annunzio	S.	2	#173	Video 1	Ricostruire Dentro: La Vescica
D'Annunzio	S.	2.	#171	Video 5 -	Video Rene
D'Annunzio	S.	3.	#172	Video 5 -	Video Rene
D'Arrigo	L.	4.	#259	Video 4 -	Calcolosi e Andrologia
D'Arrigo	L.	5.	#258	Video 4 -	Calcolosi e Andrologia
D'Arrigo	L.	3.	#186:	Comun. 2	Urolitiasi Ed Incontinenza Urinaria

Cognome		n. Abs	#	sessione	
Dall'Oglio	B.	9.	#139	Video 3 -	Chirurgia Prostatica "High Level"
Dall'Oglio	B.	4.	#136	Video 5 -	Video Rene
Dall'Oglio	B.	8.	#274	Video 5 -	Video Rene
Dalmaso	E.	4.	#259	Video 4 -	Calcolosi e Andrologia
Dalmaso	E.	5.	#258	Video 4 -	Calcolosi e Andrologia
Daniele	G.P.	3.	#301	Comun. 4 -	Tutto Rene
De Concilio	B.	1.	#225	Comun. 4 -	Tutto Rene
De Concilio	B.	12.	#223	Comun. 5 -	Ca Prostatico: Diagnostica E Terapia
De Concilio	B.	11.	#180	Comun. 7 -	Andronews
De Concilio	B.	13.	#224	Comun. 7 -	Andronews
De Giorgi	U.	16.	#192	Comun. 5 -	Ca Prostatico: Diagnostica E Terapia
De Luise	E.	8.	#274	Video 5 -	Video Rene
De Marco	F.	5.	#121:	Comun. 2	Urolitiasi Ed Incontinenza Urinaria
De Marco	F.	6.	#122:	Comun. 2	Urolitiasi Ed Incontinenza Urinaria
De Nunzio	C.	1.	#167:	Comun. 3	Bladder Destiny
De Nunzio	C.	10.	#177	Comun. 5 -	Ca Prostatico: Diagnostica E Terapia
de Souza Melo	P.	2.	#239:	Comun. 2	Urolitiasi Ed Incontinenza Urinaria
Dell'Orco	D.	8.	#291	Video 4 -	Calcolosi e Andrologia
Deluise	E.	9.	#139	Video 3 -	Chirurgia Prostatica "High Level"
Deluise	E.	4.	#136	Video 5 -	Video Rene
Derweesh	I.	7.	#182	Comun. 4 -	Tutto Rene
Di Benedetto	A.	6.	#248	Comun. 4 -	Tutto Rene
Di Benedetto	A.	13.	#305	Comun. 5 -	Ca Prostatico: Diagnostica E Terapia
Di Benedetto	A.	8.	#249	Comun. 7 -	Andronews
Di Benedetto	A.	9.	#293	Comun. 7 -	Andronews
Di Biase	M.	8.	#316	Video 1	Ricostruire Dentro: La Vescica
Di Biase	M.	2.	#317	Video 2 -	Chirurgia Di Precisione
Di Biase	M.	1.	#265:	Comun. 7 -	Andronews
Di Biase	M.	2.	#246	Comun. 7 -	Andronews
Di Carlo	A.	2.	#170	Comun. 4 -	Tutto Rene
Di Domenico	A.	2.	#216	Comun. 1	LUTS E IPB
Di Domenico	D.	6.	#285	Comun. 3	Bladder Destiny
Di Domenico	A.	4.	#222	Video 2 -	Chirurgia Di Precisione
Di Domenico	A.	9.	#221	Comun. 4 -	Tutto Rene
Di Grazia	E.	3.	#186:	Comun. 2	Urolitiasi Ed Incontinenza Urinaria
Di Iorio	V.	5.	#214	Comun. 5 -	Ca Prostatico: Diagnostica E Terapia
Di Lauro	G..	4.	#281	Comun. 7 -	Andronews
Di Lauro	G.	7.	#280	Comun. 7 -	Andronews
Di Lorenzo	D.	9.	#276	Comun. 1	LUTS E IPB
Di Mauro	U.	10.	#307	Comun. 4 -	Tutto Rene
Di Mauro	U.	11.	#306	Comun. 4 -	Tutto Rene
Di Mauro	D.	3.	#186:	Comun. 2	Urolitiasi Ed Incontinenza Urinaria
Di Mauro	U.	7.	#310	Video 5 -	Video Rene
Di Prima	D.	14.	#313:	Comun. 2	Urolitiasi Ed Incontinenza Urinaria
Diambrini	M.	8.	#316	Video 1	Ricostruire Dentro: La Vescica
Diambrini	M.	2.	#317	Video 2 -	Chirurgia Di Precisione
Diambrini	M.	1.	#265:	Comun. 7 -	Andronews
Diambrini	M.	2.	#246	Comun. 7 -	Andronews
Dinale	F.	4.	#220	Comun. 1	LUTS E IPB
Disabato	G	14.	#313:	Comun. 2	Urolitiasi Ed Incontinenza Urinaria

Cognome		n. Abs	#	sessione	
Drei	B.	7.	#292	Video 4 -	Calcolosi e Andrologia
Drei	B.	8.	#291	Video 4 -	Calcolosi e Andrologia
Eisner	B.	2.	#239:	Comun. 2	Urolitiasi Ed Incontinenza Urinaria
Emiliani	E.	2.	#239:	Comun. 2	Urolitiasi Ed Incontinenza Urinaria
Ennas	M.	2.	#216	Comun. 1	LUTS E IPB
Ennas	M.	4.	#222	Video 2 -	Chirurgia Di Precisione
Ennas	M.	9.	#221	Comun. 4 -	Tutto Rene
Erinnio	M.	6.	#277	Video 3 -	Chirurgia Prostatica "High Level"
Erinnio	M.	8.	#279	Comun. 6 -	High Technology IPB
Erinnio	M.	7.	#297:	Comun. 2	Urolitiasi Ed Incontinenza Urinaria
Eun	D.	7.	#182	Comun. 4 -	Tutto Rene
Fabiano	M.	3.	#149	Video 2 -	Chirurgia Di Precisione
Fabiano	M.	13.	#156	Comun. 4 -	Tutto Rene
Fabiano	M.	17.	#204	Comun. 5 -	Ca Prostatico: Diagnostica E Terapia
Fabiano	M.	6.	#195	Video 4 -	Calcolosi e Andrologia
Facchini	F.	4.	#220	Comun. 1	LUTS E IPB
Falcone	M.	10.	#193	Comun. 7 -	Andronews
Fandella	A.	6.	#206	Comun. 5 -	Ca Prostatico: Diagnostica E Terapia
Fandella	A.	3.	#207	Comun. 6 -	High Technology IPB
Fantini	L.	5.	#214	Comun. 5 -	Ca Prostatico: Diagnostica E Terapia
Fasbender Jacobitti	M.	5.	#143	Comun. 1	LUTS E IPB
Fasbender Jacobitti	M.	9.	#276	Comun. 1	LUTS E IPB
Fasbender Jacobitti	M.	6.	#195	Video 4 -	Calcolosi e Andrologia
Fasbender Jacobitti	M.	3.	#189	Comun. 7 -	Andronews
Fasbender Jacobitti	M.	5.	#282	Comun. 7 -	Andronews
Fasbender Jacobitti	M.	6.	#142	Comun. 7 -	Andronews
Fazi	F.	2.	#170	Comun. 4 -	Tutto Rene
Fedelini	P.	5.	#143	Comun. 1	LUTS E IPB
Fedelini	P.	9.	#276	Comun. 1	LUTS E IPB
Fedelini	M.	3.	#149	Video 2 -	Chirurgia Di Precisione
Fedelini	M.	13.	#156	Comun. 4 -	Tutto Rene
Fedelini	P.	13.	#156	Comun. 4 -	Tutto Rene
Fedelini	M.	17.	#204	Comun. 5 -	Ca Prostatico: Diagnostica E Terapia
Fedelini	P.	17.	#204	Comun. 5 -	Ca Prostatico: Diagnostica E Terapia
Fedelini	P.	6.	#195	Video 4 -	Calcolosi e Andrologia
Fedelini	P.	3.	#189	Comun. 7 -	Andronews
Fedelini	P.	5.	#282	Comun. 7 -	Andronews
Fedelini	P.	6.	#142	Comun. 7 -	Andronews
Fedelini	P.	3.	#149	Video 2 -	Chirurgia Di Precisione
Fedelini1	P.	3.	#205	Comun. 3	Bladder Destiny
Ferraiuolo	M.	17.	#204	Comun. 5 -	Ca Prostatico: Diagnostica E Terapia
Ferrara	V.	8.	#316	Video 1	Ricostruire Dentro: La Vescica
Ferrara	V.	2.	#317	Video 2 -	Chirurgia Di Precisione
Ferrara	V.	1.	#265:	Comun. 7 -	Andronews
Ferrara	V.	2.	#246	Comun. 7 -	Andronews
Ferrari	G.	10.	#193	Comun. 7 -	Andronews
Ferretti	S.	4.	#220	Comun. 1	LUTS E IPB
Ferriero	M.	2	#173	Video 1	Ricostruire Dentro: La Vescica
Ferriero	M.	1.	#164	Video 1	Ricostruire Dentro: La Vescica
Ferriero	M.	8.	#178	Comun. 1	LUTS E IPB

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Ferriero	M.	1.	#167:	Comun. 3	Bladder Destiny
Ferriero	M.	6.	#165	Video 2 -	Chirurgia Di Precisione
Ferriero	M.	4.	#161	Comun. 4 -	Tutto Rene
Ferriero	M.	5.	#160	Comun. 4 -	Tutto Rene
Ferriero	M.	8.	#183	Comun. 4 -	Tutto Rene
Ferriero	M.	1.	#176	Video 3 -	Chirurgia Prostatica "High Level"
Ferriero	M.	8.	#163	Comun. 5 -	Ca Prostatico: Diagnostica E Terapia
Ferriero	M.	10.	#177	Comun. 5 -	Ca Prostatico: Diagnostica E Terapia
Ferriero	M.	11.	#180	Comun. 7 -	Andronews
Ferriero	M.	1.	#174	Video 5 -	Video Rene
Ferriero	M.	2.	#171	Video 5 -	Video Rene
Ferriero	M.	3.	#172	Video 5 -	Video Rene
Ferriero	M.	9.	#175	Video 5 -	Video Rene
Ferroni	F.	5.	#214	Comun. 5 -	Ca Prostatico: Diagnostica E Terapia
Fiori	C.	7.	#182	Comun. 4 -	Tutto Rene
Fiori	C.	11.	#180	Comun. 7 -	Andronews
Fornasari	L.	3.	#301	Comun. 4 -	Tutto Rene
Fragalà	E.	5.	#214	Comun. 5 -	Ca Prostatico: Diagnostica E Terapia
Fragalà	E.	16.	#192	Comun. 5 -	Ca Prostatico: Diagnostica E Terapia
Franzese	D.	3.	#158	Video 1	Ricostruire Dentro: La Vescica
Franzese	D..	1.	#157	Video 2 -	Chirurgia Di Precisione
Franzese	D.	15.	#152	Comun. 5 -	Ca Prostatico: Diagnostica E Terapia
Franzese	D.	5.	#150	Video 5 -	Video Rene
Frattini	A.	4.	#220	Comun. 1	LUTS E IPB
Fuschi	A.	1.	#167:	Comun. 3	Bladder Destiny
Galletta	V.	9.	#139	Video 3 -	Chirurgia Prostatica "High Level"
Galletta	V.	4.	#136	Video 5 -	Video Rene
Galletta	V.	8.	#274	Video 5 -	Video Rene
Gallucci	M.	2.	#173	Video 1	Ricostruire Dentro: La Vescica
Gallucci	M.	1.	#164	Video 1	Ricostruire Dentro: La Vescica
Gallucci	M.	8.	#178	Comun. 1	LUTS E IPB
Gallucci	M.	2.	#170	Comun. 4 -	Tutto Rene
Gallucci	M.	4.	#161	Comun. 4 -	Tutto Rene
Gallucci	M.	5.	#160	Comun. 4 -	Tutto Rene
Gallucci	M.	7.	#182	Comun. 4 -	Tutto Rene
Gallucci	M.	8.	#183	Comun. 4 -	Tutto Rene
Gallucci	M.	1.	#176	Video 3 -	Chirurgia Prostatica "High Level"
Gallucci	M.	8.	#163	Comun. 5 -	Ca Prostatico: Diagnostica E Terapia
Gallucci	M.	10.	#177	Comun. 5 -	Ca Prostatico: Diagnostica E Terapia
Gallucci	M.	6.	#230	Comun. 6 -	High Technology IPB
Gallucci	M.	11.	#180	Comun. 7 -	Andronews
Gallucci	M.	1.	#174	Video 5 -	Video Rene
Gallucci	M.	2.	#171	Video 5 -	Video Rene
Gallucci	M.	3.	#172	Video 5 -	Video Rene
Gallucci	M.	9.	#175	Video 5 -	Video Rene
Gargiulo	S.	16.	#192	Comun. 5 -	Ca Prostatico: Diagnostica E Terapia
Gatti	L.	10.	#193	Comun. 7 -	Andronews
Gennarelli	N.	6.	#285	Comun. 3	Bladder Destiny
Gentile	B.C.	10.	#262:	Comun. 2	Urolitiasi Ed Incontinenza Urinaria
Gentile	B.C.	2.	#266	Comun. 3	Bladder Destiny

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Gentile	B.C.	5.	#264	Comun. 3	Bladder Destiny
Gentile	B.C.	3.	#267	Comun. 5 -	Ca Prostatico: Diagnostica E Terapia
Gentile	B.C.	4.	#263	Comun. 6 -	High Technology IPB
Ghabin	H.	12.	#251	Comun. 7 -	Andronews
Giammusso	L.M.	2.	#170	Comun. 4 -	Tutto Rene
Giampieretti	R.	1.	#265:	Comun. 7 -	Andronews
Giannella	R.	6.	#195	Video 4 -	Calcolosi e Andrologia
Giannella	R.	3.	#189	Comun. 7 -	Andronews
Giannubilo	W.	8.	#316	Video 1	Ricostruire Dentro: La Vescica
Giannubilo	W.	2.	#317	Video 2 -	Chirurgia Di Precisione
Giannubilo	W.	1.	#265:	Comun. 7 -	Andronews
Giannubilo	W.	2.	#246	Comun. 7 -	Andronews
Giulianelli	R.	9.	#268	Video 1	Ricostruire Dentro: La Vescica
Giulianelli	R.	10.	#262:	Comun. 2	Urolitiasi Ed Incontinenza Urinaria
Giulianelli	R.	2.	#266	Comun. 3	Bladder Destiny
Giulianelli	R.	5.	#264	Comun. 3	Bladder Destiny
Giulianelli	R.	4.	#269	Video 3 -	Chirurgia Prostatica "High Level"
Giulianelli	R.	5.	#270	Video 3 -	Chirurgia Prostatica "High Level"
Giulianelli	R.	7.	#271	Video 3 -	Chirurgia Prostatica "High Level"
Giulianelli	R.	3.	#267	Comun. 5 -	Ca Prostatico: Diagnostica E Terapia
Giulianelli	R.	4.	#263	Comun. 6 -	High Technology IPB
Gobbo	A.	3.	#301	Comun. 4 -	Tutto Rene
Gokce	M.	2.	#239:	Comun. 2	Urolitiasi Ed Incontinenza Urinaria
Gontero	P.	10.	#193	Comun. 7 -	Andronews
Grande	M.S.	4.	#220	Comun. 1	LUTS E IPB
Grasso	A.	7.	#182	Comun. 4 -	Tutto Rene
Grimaldi	G.	3.	#158	Video 1	Ricostruire Dentro: La Vescica
Grimaldi	G.	4.	#153	Comun. 3	Bladder Destiny
Grimaldi	G.	1.	#157	Video 2 -	Chirurgia Di Precisione
Grimaldi	G.	15.	#152	Comun. 5 -	Ca Prostatico: Diagnostica E Terapia
Grimaldi	G.	5.	#150	Video 5 -	Video Rene
Grizzi	F.	3.	#145	Comun. 1	LUTS E IPB
Grizzi	F.	8.	#148:	Comun. 2	Urolitiasi Ed Incontinenza Urinaria
Grizzi	F.	12.	#144	Comun. 4 -	Tutto Rene
Grizzi	F.	1.	#147	Comun. 5 -	Ca Prostatico: Diagnostica E Terapia
Grizzi	F.	2.	#169	Comun. 5 -	Ca Prostatico: Diagnostica E Terapia
Grizzi	F.	4.	#168	Comun. 5 -	Ca Prostatico: Diagnostica E Terapia
Grizzi	F.	14.	#141	Comun. 5 -	Ca Prostatico: Diagnostica E Terapia
Grizzi	F.	1.	#137	Comun. 6 -	High Technology IPB
Grizzi	F.	2.	#140	Comun. 6 -	High Technology IPB
Grosso	G.	1.	#303	Comun. 1	LUTS E IPB
Grosso	G.	7.	#304	Comun. 5 -	Ca Prostatico: Diagnostica E Terapia
Grosso	G.	6.	#321	Video 5 -	Video Rene
Guaglianone	S.	2	#173	Video 1	Ricostruire Dentro: La Vescica
Guaglianone	S.	1.	#164	Video 1	Ricostruire Dentro: La Vescica
Guaglianone	S.	4.	#161	Comun. 4 -	Tutto Rene
Guaglianone	S.	5.	#160	Comun. 4 -	Tutto Rene
Guaglianone	S.	10.	#177	Comun. 5 -	Ca Prostatico: Diagnostica E Terapia
Guaglianone	S.	1.	#174	Video 5 -	Video Rene
Guaglianone	S.	2.	#171	Video 5 -	Video Rene

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Guaglianone	S.	3.	#172	Video 5 -	Video Rene
Guaglianone	S.	9.	#175	Video 5 -	Video Rene
Guatelli	S.	9.	#139	Video 3 -	Chirurgia Prostatica "High Level"
Guatelli	S.	8.	#274	Video 5 -	Video Rene
Guatelli	S.	4.	#136	Video 5 -	Video Rene
Guazzieri	S.	6.	#206	Comun. 5 -	Ca Prostatico: Diagnostica E Terapia
Guazzieri	S.	3.	#207	Comun. 6 -	High Technology IPB
Guazzoni	G.	3.	#145	Comun. 1	LUTS E IPB
Guazzoni	G.	8.	#148:	Comun. 2	Urolitiasi Ed Incontinenza Urinaria
Guazzoni	G.	12.	#144	Comun. 4 -	Tutto Rene
Guazzoni	G.	1.	#147	Comun. 5 -	Ca Prostatico: Diagnostica E Terapia
Guazzoni	G.	2.	#169	Comun. 5 -	Ca Prostatico: Diagnostica E Terapia
Guazzoni	G.	4.	#168	Comun. 5 -	Ca Prostatico: Diagnostica E Terapia
Guazzoni	G.	14.	#141	Comun. 5 -	Ca Prostatico: Diagnostica E Terapia
Guazzoni	G.	1.	#137	Comun. 6 -	High Technology IPB
Guazzoni	G.	2.	#140	Comun. 6 -	High Technology IPB
Gunelli	R.	5.	#214	Comun. 5 -	Ca Prostatico: Diagnostica E Terapia
Gunelli	R.	16.	#192	Comun. 5 -	Ca Prostatico: Diagnostica E Terapia
Gurioli	G.	16.	#192	Comun. 5 -	Ca Prostatico: Diagnostica E Terapia
Hussein M I	Y.	5.	#226	Comun. 6 -	High Technology IPB
Iacovelli	V.	10.	#193	Comun. 7 -	Andronews
Iaiza	A.	2.	#170	Comun. 4 -	Tutto Rene
Impedovo	S.V.	6.	#277	Video 3 -	Chirurgia Prostatica "High Level"
Impedovo	S.V.	8.	#279	Comun. 6 -	High Technology IPB
Impedovo	S.V.	7.	#297:	Comun. 2	Urolitiasi Ed Incontinenza Urinaria
Intilla	O.	10.	#307	Comun. 4 -	Tutto Rene
Intilla	O.	11.	#306	Comun. 4 -	Tutto Rene
Intilla	O.	7.	#310	Video 5 -	Video Rene
Introini	C.	2.	#216	Comun. 1	LUTS E IPB
Introini	C.	4.	#222	Video 2 -	Chirurgia Di Precisione
Introini	C.	9.	#221	Comun. 4 -	Tutto Rene
Ippolito	C.	3.	#301	Comun. 4 -	Tutto Rene
Izzo	A.	3.	#158	Video 1	Ricostruire Dentro: La Vescica
Izzo	A.	4.	#153	Comun. 3	Bladder Destiny
Izzo	A.	1.	#157	Video 2 -	Chirurgia Di Precisione
Izzo	A..	15.	#152	Comun. 5 -	Ca Prostatico: Diagnostica E Terapia
Izzo	A.	5.	#150	Video 5 -	Video Rene
Kwe	J.E.	4.	#220	Comun. 1	LUTS E IPB
La Rosa	V.L.	3.	#186:	Comun. 2	Urolitiasi Ed Incontinenza Urinaria
La Torre	G.	2.	#169	Comun. 5 -	Ca Prostatico: Diagnostica E Terapia
Langella	N.A.	5.	#282	Comun. 7 -	Andronews
Larcher	A.	7.	#182	Comun. 4 -	Tutto Rene
Larosa	M.	4.	#220	Comun. 1	LUTS E IPB
Lee	J.	7.	#182	Comun. 4 -	Tutto Rene
Lobianco	R.	7.	#280	Comun. 7 -	Andronews
Locunto	U.	14.	#313:	Comun. 2	Urolitiasi Ed Incontinenza Urinaria
Lolli	C.	16.	#192	Comun. 5 -	Ca Prostatico: Diagnostica E Terapia
Lombardo	R.	9.	#268	Video 1	Ricostruire Dentro: La Vescica
Lombardo	R.	10.	#262:	Comun. 2	Urolitiasi Ed Incontinenza Urinaria
Lombardo	R.	2.	#266	Comun. 3	Bladder Destiny

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Lombardo	R.	5.	#264	Comun. 3	Bladder Destiny
Lombardo	R.	5.	#160	Comun. 4 -	Tutto Rene
Lombardo	R.	4.	#269	Video 3 -	Chirurgia Prostatica "High Level"
Lombardo	R.	5.	#270	Video 3 -	Chirurgia Prostatica "High Level"
Lombardo	R.	7.	#271	Video 3 -	Chirurgia Prostatica "High Level"
Lopes Mendes	A.L.	10.	#262:	Comun. 2	Urolitiasi Ed Incontinenza Urinaria
Lopes Mendes	A.L.	2.	#266	Comun. 3	Bladder Destiny
Lopes Mendes	A.L.	5.	#264	Comun. 3	Bladder Destiny
Lopes Mendes	A.L.	3.	#267	Comun. 5 -	Ca Prostatico: Diagnostica E Terapia
Lopes Mendes	A.L.	4.	#263	Comun. 6 -	High Technology IPB
Luciano	M.	4.	#136	Video 5 -	Video Rene
Luciano	M.	8.	#274	Video 5 -	Video Rene
Lunardini	L.	6.	#248	Comun. 4 -	Tutto Rene
Lunardini	L.	13.	#305	Comun. 5 -	Ca Prostatico: Diagnostica E Terapia
Lunardini	L.	8.	#249	Comun. 7 -	Andronews
Lunardini	L.	9.	#293	Comun. 7 -	Andronews
Luongo	A.	6.	#285	Comun. 3	Bladder Destiny
Monga	M.	2.	#239:	Comun. 2	Urolitiasi Ed Incontinenza Urinaria
Maestroni	U.V.	4.	#220	Comun. 1	LUTS E IPB
Malagola	G.	3.	#145	Comun. 1	LUTS E IPB
Malagola	G.	12.	#144	Comun. 4 -	Tutto Rene
Malagola	G.	1.	#147	Comun. 5 -	Ca Prostatico: Diagnostica E Terapia
Malagola	G.	2.	#169	Comun. 5 -	Ca Prostatico: Diagnostica E Terapia
Malagola	G.	4.	#168	Comun. 5 -	Ca Prostatico: Diagnostica E Terapia
Malagola	G.	14.	#141	Comun. 5 -	Ca Prostatico: Diagnostica E Terapia
Malagola	G.	1.	#137	Comun. 6 -	High Technology IPB
Malagola	G.	2.	#140	Comun. 6 -	High Technology IPB
Malossini	G.	10.	#177	Comun. 5 -	Ca Prostatico: Diagnostica E Terapia
Mandressi	A.	3.	#145	Comun. 1	LUTS E IPB
Mandressi	A.	12.	#144	Comun. 4 -	Tutto Rene
Mandressi	A.	1.	#147	Comun. 5 -	Ca Prostatico: Diagnostica E Terapia
Mandressi	A.	2.	#169	Comun. 5 -	Ca Prostatico: Diagnostica E Terapia
Mandressi	A.	4.	#168	Comun. 5 -	Ca Prostatico: Diagnostica E Terapia
Mandressi	A.	14.	#141	Comun. 5 -	Ca Prostatico: Diagnostica E Terapia
Mandressi	A.	8.	#148:	Comun. 2	Urolitiasi Ed Incontinenza Urinaria
Mandressi	A.	1.	#137	Comun. 6 -	High Technology IPB
Mandressi	A.	2.	#140	Comun. 6 -	High Technology IPB
Manzo	B.	2.	#239:	Comun. 2	Urolitiasi Ed Incontinenza Urinaria
Marano	A.	6.	#277	Video 3 -	Chirurgia Prostatica "High Level"
Marano	A.	8.	#279	Comun. 6 -	High Technology IPB
Marano	A.	7.	#297:	Comun. 2	Urolitiasi Ed Incontinenza Urinaria
Marco	L.	9.	#139	Video 3 -	Chirurgia Prostatica "High Level"
Marconi	A.	8.	#316	Video 1	Ricostruire Dentro: La Vescica
Marconi	A.	2.	#317	Video 2 -	Chirurgia Di Precisione
Marconi	A.	2.	#246	Comun. 7 -	Andronews
Marconi	A.	1.	#265:	Comun. 7 -	Andronews
Mari	A.	7.	#182	Comun. 4 -	Tutto Rene
Masala	D.	4.	#281	Comun. 7 -	Andronews
Masala	D.	7.	#280	Comun. 7 -	Andronews
Cognome		n. Abs	#	sessione	

<b>Mastrangelo</b>	P.A.	14.	#313:	Comun. 2	Urolitiasi Ed Incontinenza Urinaria
<b>Mastroianni</b>	R.	2	#173	Video 1	Ricostruire Dentro: La Vescica
<b>Mastroianni</b>	R.	1.	#164	Video 1	Ricostruire Dentro: La Vescica
<b>Mastroianni</b>	R.	6.	#165	Video 2 -	Chirurgia Di Precisione
<b>Mastroianni</b>	R.	4.	#161	Comun. 4 -	Tutto Rene
<b>Mastroianni</b>	R.	5.	#160	Comun. 4 -	Tutto Rene
<b>Mastroianni</b>	R.	8.	#183	Comun. 4 -	Tutto Rene
<b>Mastroianni</b>	R.	1.	#176	Video 3 -	Chirurgia Prostatica "High Level"
<b>Mastroianni</b>	R.	8.	#163	Comun. 5 -	Ca Prostatico: Diagnostica E Terapia
<b>Mastroianni</b>	R..	10.	#177	Comun. 5 -	Ca Prostatico: Diagnostica E Terapia
<b>Mastroianni</b>	R.	11.	#180	Comun. 7 -	Andronews
<b>Mastroianni</b>	R.	1.	#174	Video 5 -	Video Rene
<b>Mastroianni</b>	R.	3.	#172	Video 5 -	Video Rene
<b>Mastroianni</b>	R.	9.	#175	Video 5 -	Video Rene
<b>Mastroianni</b>	R.	1.	#167:	Comun. 3	Bladder Destiny
<b>Mastroserio</b>	L.A.	14.	#313:	Comun. 2	Urolitiasi Ed Incontinenza Urinaria
<b>Matteucci</b>	F.	5.	#214	Comun. 5 -	Ca Prostatico: Diagnostica E Terapia
<b>Maugeri</b>	O.	4.	#259	Video 4 -	Calcolosi e Andrologia
<b>Maugeri</b>	O.	5.	#258	Video 4 -	Calcolosi e Andrologia
<b>Maugeri</b>	O.	2.	#239:	Comun. 2	Urolitiasi Ed Incontinenza Urinaria
<b>Maurizio</b>	F.	3.	#205	Comun. 3	Bladder Destiny
<b>Maurizio</b>	C.	3.	#205	Comun. 3	Bladder Destiny
<b>Mavilla</b>	L.	10.	#262:	Comun. 2	Urolitiasi Ed Incontinenza Urinaria
<b>Mavilla</b>	L.	2.	#266	Comun. 3	Bladder Destiny
<b>Mavilla</b>	L.	5.	#264	Comun. 3	Bladder Destiny
<b>Mavilla</b>	L.	3.	#267	Comun. 5 -	Ca Prostatico: Diagnostica E Terapia
<b>Mavilla</b>	L.	4.	#263	Comun. 6 -	High Technology IPB
<b>Mazzoccoli</b>	B.	14.	#313:	Comun. 2	Urolitiasi Ed Incontinenza Urinaria
<b>Mazzucchi</b>	E.	2.	#239:	Comun. 2	Urolitiasi Ed Incontinenza Urinaria
<b>Meccariello</b>	C.	3.	#205	Comun. 3	Bladder Destiny
<b>Meccariello</b>	C.	3.	#149	Video 2 -	Chirurgia Di Precisione
<b>Meccariello</b>	C.	13.	#156	Comun. 4 -	Tutto Rene
<b>Meccariello</b>	C.	17.	#204	Comun. 5 -	Ca Prostatico: Diagnostica E Terapia
<b>Milesi</b>	R.	5.	#226	Comun. 6 -	High Technology IPB
<b>Miller</b>	D.L.	8.	#148:	Comun. 2	Urolitiasi Ed Incontinenza Urinaria
<b>Minervini</b>	A.	7.	#182	Comun. 4 -	Tutto Rene
<b>Mogorovich</b>	A.	6.	#248	Comun. 4 -	Tutto Rene
<b>Mogorovich</b>	A.	13.	#305	Comun. 5 -	Ca Prostatico: Diagnostica E Terapia
<b>Mogorovich</b>	A.	8.	#249	Comun. 7 -	Andronews
<b>Mogorovich</b>	A.	9.	#293	Comun. 7 -	Andronews
<b>Molisso</b>	G.	10.	#307	Comun. 4 -	Tutto Rene
<b>Molisso</b>	G.	11.	#306	Comun. 4 -	Tutto Rene
<b>Molisso</b>	G.	9.	#308	Comun. 5 -	Ca Prostatico: Diagnostica E Terapia
<b>Montorsi</b>	F.	7.	#182	Comun. 4 -	Tutto Rene
<b>Mordente</b>	S.	7.	#280	Comun. 7 -	Andronews
<b>Moretti</b>	M.	4.	#220	Comun. 1	LUTS E IPB
<b>Motter</b>	M.	11.	#180	Comun. 7 -	Andronews
<b>Muscariello</b>	R.	3.	#158	Video 1	Ricostruire Dentro: La Vescica
<b>Muscariello</b>	R.	4.	#153	Comun. 3	Bladder Destiny
<b>Muscariello</b>	R.	1.	#157	Video 2 -	Chirurgia Di Precisione

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Muscariello	R.	15.	#152	Comun. 5 -	Ca Prostatico: Diagnostica E Terapia
Muscariello	R.	5.	#150	Video 5 -	Video Rene
Nacchia	A.	1.	#167:	Comun. 3	Bladder Destiny
Napodano	G.	10.	#307	Comun. 4 -	Tutto Rene
Napodano	G.	11.	#306	Comun. 4 -	Tutto Rene
Napodano	G.	8.	#163	Comun. 5 -	Ca Prostatico: Diagnostica E Terapia
Napodano	G.	9.	#308	Comun. 5 -	Ca Prostatico: Diagnostica E Terapia
Napodano	G.	7.	#310	Video 5 -	Video Rene
Nicolosi	F.	3.	#186:	Comun. 2	Urolitiasi Ed Incontinenza Urinaria
Nidini	M.	9.	#139	Video 3 -	Chirurgia Prostatica "High Level"
Nidini	M.	4.	#136	Video 5 -	Video Rene
Nidini	M.	8.	#274	Video 5 -	Video Rene
Nugnes	M.R.	4.	#281	Comun. 7 -	Andronews
Nugnes	M.R.	7.	#280	Comun. 7 -	Andronews
Palminteri	E.	10.	#193	Comun. 7 -	Andronews
Palumbo	F.	6.	#277	Video 3 -	Chirurgia Prostatica "High Level"
Palumbo	F.	8.	#279	Comun. 6 -	High Technology IPB
Pampaloni	S.	6.	#248	Comun. 4 -	Tutto Rene
Pampaloni	S.	13.	#305	Comun. 5 -	Ca Prostatico: Diagnostica E Terapia
Pampaloni	S.	8.	#249	Comun. 7 -	Andronews
Pampaloni	S.	9.	#293	Comun. 7 -	Andronews
Pane	U.	7.	#310	Video 5 -	Video Rene
Panebianco	V.	10.	#177	Comun. 5 -	Ca Prostatico: Diagnostica E Terapia
Papa	S.	3.	#301	Comun. 4 -	Tutto Rene
Paparo	F.	4.	#222	Video 2 -	Chirurgia Di Precisione
Parma	P.	9.	#139	Video 3 -	Chirurgia Prostatica "High Level"
Parma	P.	4.	#136	Video 5 -	Video Rene
Parma	P.	8.	#274	Video 5 -	Video Rene
Pastore	A.	1.	#167:	Comun. 3	Bladder Destiny
Pastore	A.L.	2.	#170	Comun. 4 -	Tutto Rene
Pecoraro	M.	10.	#177	Comun. 5 -	Ca Prostatico: Diagnostica E Terapia
Pennisi	M.	5.	#258	Video 4 -	Calcolosi e Andrologia
Perdonà	S.	3.	#158	Video 1	Ricostruire Dentro: La Vescica
Perdonà	S.	4.	#153	Comun. 3	Bladder Destiny
Perdonà	S.	1.	#157	Video 2 -	Chirurgia Di Precisione
Perdonà	S.	15.	#152	Comun. 5 -	Ca Prostatico: Diagnostica E Terapia
Perdonà	S.	5.	#150	Video 5 -	Video Rene
Peretti	D.	4.	#259	Video 4 -	Calcolosi e Andrologia
Peretti	D.	5.	#258	Video 4 -	Calcolosi e Andrologia
Perra	M.	3.	#158	Video 1	Ricostruire Dentro: La Vescica
Perra	M.	1.	#157	Video 2 -	Chirurgia Di Precisione
Perra	M.	15.	#152	Comun. 5 -	Ca Prostatico: Diagnostica E Terapia
Perra	M.	5.	#150	Video 5 -	Video Rene
Persico	F.	5.	#143	Comun. 1	LUTS E IPB
Persico	F.	13.	#156	Comun. 4 -	Tutto Rene
Persico	F.	3.	#189	Comun. 7 -	Andronews
Pescatori	E.	7.	#292	Video 4 -	Calcolosi e Andrologia
Pescatori	E.	8.	#291	Video 4 -	Calcolosi e Andrologia
Petrozza	V.	2.	#170	Comun. 4 -	Tutto Rene
Pilotto	A.	2.	#216	Comun. 1	LUTS E IPB

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Polara	A.	1.	#303	Comun. 1	LUTS E IPB
Polara	A.	7.	#304	Comun. 5 -	Ca Prostatico: Diagnostica E Terapia
Polara	A.	6.	#321	Video 5 -	Video Rene
Porpiglia	F.	7.	#182	Comun. 4 -	Tutto Rene
Porpiglia	F.	11.	#180	Comun. 7 -	Andronews
Porta	N.	2.	#170	Comun. 4 -	Tutto Rene
Pozzoli	G.L.	4.	#220	Comun. 1	LUTS E IPB
Preto	M.	10.	#193	Comun. 7 -	Andronews
Prezioso	D.	6.	#285	Comun. 3	Bladder Destiny
Prisco	E..	17.	#204	Comun. 5 -	Ca Prostatico: Diagnostica E Terapia
Proietti	F.	8.	#163	Comun. 5 -	Ca Prostatico: Diagnostica E Terapia
Pucci	L.	5.	#143	Comun. 1	LUTS E IPB
Pucci	L.	9.	#276	Comun. 1	LUTS E IPB
Pucci	L.	3.	#205	Comun. 3	Bladder Destiny
Pucci	L.	6.	#195	Video 4 -	Calcolosi e Andrologia
Pucci	L.	3.	#189	Comun. 7 -	Andronews
Pucci	L.	5.	#282	Comun. 7 -	Andronews
Pucci	L.	6.	#142	Comun. 7 -	Andronews
Pulvirenti	M.	16.	#192	Comun. 5 -	Ca Prostatico: Diagnostica E Terapia
Punziano	M.	4.	#281	Comun. 7 -	Andronews
Quarto	G.	3.	#158	Video 1	Ricostruire Dentro: La Vescica
Quarto	G.	4.	#153	Comun. 3	Bladder Destiny
Quarto	G.	1.	#157	Video 2 -	Chirurgia Di Precisione
Quarto	G.	15.	#152	Comun. 5 -	Ca Prostatico: Diagnostica E Terapia
Quarto	G.	5.	#150	Video 5 -	Video Rene
Rabito	S.	7.	#292	Video 4 -	Calcolosi e Andrologia
Rapisarda	S.	1.	#303	Comun. 1	LUTS E IPB
Rapisarda	S.	1.	#225	Comun. 4 -	Tutto Rene
Rapisarda	S.	7.	#304	Comun. 5 -	Ca Prostatico: Diagnostica E Terapia
Rapisarda	S.	6.	#321	Video 5 -	Video Rene
Realfonso	T.	10.	#307	Comun. 4 -	Tutto Rene
Realfonso	T.	11.	#306	Comun. 4 -	Tutto Rene
Realfonso	T.	9.	#308	Comun. 5 -	Ca Prostatico: Diagnostica E Terapia
Realfonso	T.	7.	#310	Video 5 -	Video Rene
Ricapito	V.D.	6.	#277	Video 3 -	Chirurgia Prostatica "High Level"
Ricapito	V.D.	8.	#279	Comun. 6 -	High Technology IPB
Ricapito	V.D.	7.	#297:	Comun. 2	Urolitiasi Ed Incontinenza Urinaria
Ricciuti	G.	5.	#121:	Comun. 2	Urolitiasi Ed Incontinenza Urinaria
Ricciuti	G.	6.	#122:	Comun. 2	Urolitiasi Ed Incontinenza Urinaria
Rizzo	G.	2.	#266	Comun. 3	Bladder Destiny
Rizzo	G.	3.	#267	Comun. 5 -	Ca Prostatico: Diagnostica E Terapia
Rocca	G.C.	3.	#301	Comun. 4 -	Tutto Rene
Romeo	G.	6.	#142	Comun. 7 -	Andronews
Romis	L.	4.	#281	Comun. 7 -	Andronews
Rossetti	V.	5.	#214	Comun. 5 -	Ca Prostatico: Diagnostica E Terapia
Rossin	G.	3.	#301	Comun. 4 -	Tutto Rene
Ruoppo	G.	6.	#217	Video 1	Ricostruire Dentro: La Vescica
Ruoppo	G.	7.	#219	Video 1	Ricostruire Dentro: La Vescica
Rutigliani	M.	4.	#222	Video 2 -	Chirurgia Di Precisione
Cognome		n. Abs	#	sessione	

Salaris	C.	16.	#192	Comun. 5 -	Ca Prostatico: Diagnostica E Terapia
Salomone	U.	5.	#214	Comun. 5 -	Ca Prostatico: Diagnostica E Terapia
Samuelli	A.	9.	#139	Video 3 -	Chirurgia Prostatica "High Level"
Samuelli	A.	4.	#136	Video 5 -	Video Rene
Samuelli	A.	8.	#274	Video 5 -	Video Rene
Sanseverino	R.	10.	#307	Comun. 4 -	Tutto Rene
Sanseverino	R.	11.	#306	Comun. 4 -	Tutto Rene
Sanseverino	R.	8.	#163	Comun. 5 -	Ca Prostatico: Diagnostica E Terapia
Sanseverino	R.	9.	#308	Comun. 5 -	Ca Prostatico: Diagnostica E Terapia
Sanseverino	R.	7.	#310	Video 5 -	Video Rene
Saracino	G.A.	6.	#277	Video 3 -	Chirurgia Prostatica "High Level"
Saracino	G.A.	8.	#279	Comun. 6 -	High Technology IPB
Saracino	A.G.	7.	#297:	Comun. 2	Urolitiasi Ed Incontinenza Urinaria
Sardella	P.	2.	#169	Comun. 5 -	Ca Prostatico: Diagnostica E Terapia
Scandura	C.	1.	#303	Comun. 1	LUTS E IPB
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Schepisi	G.	16.	#192	Comun. 5 -	Ca Prostatico: Diagnostica E Terapia
Scoffone	C.M.	2.	#239:	Comun. 2	Urolitiasi Ed Incontinenza Urinaria
Sedigh	O.	10.	#193	Comun. 7 -	Andronews
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Sepich	C.A.	6.	#248	Comun. 4 -	Tutto Rene
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Sepich	C.A.	8.	#249	Comun. 7 -	Andronews
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Silvestri	T.	13.	#224	Comun. 7 -	Andronews
Simone	G.	2	#173	Video 1	Ricostruire Dentro: La Vescica
Simone	G.	1.	#164	Video 1	Ricostruire Dentro: La Vescica
Simone	G.	8.	#178	Comun. 1	LUTS E IPB
Simone	G.	1.	#167:	Comun. 3	Bladder Destiny
Simone	G.	6.	#165	Video 2 -	Chirurgia Di Precisione
Simone	G.	2.	#170	Comun. 4 -	Tutto Rene
Simone	G.	4.	#161	Comun. 4 -	Tutto Rene
Simone	G.	5.	#160	Comun. 4 -	Tutto Rene
Simone	G.	7.	#182	Comun. 4 -	Tutto Rene
Simone	G.	8.	#183	Comun. 4 -	Tutto Rene
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Simone	G.	8.	#163	Comun. 5 -	Ca Prostatico: Diagnostica E Terapia
Simone	G.	10.	#177	Comun. 5 -	Ca Prostatico: Diagnostica E Terapia
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Simone	G.	1.	#174	Video 5 -	Video Rene
Simone	G.	2.	#171	Video 5 -	Video Rene
Simone	G.	3.	#172	Video 5 -	Video Rene
Simone	G.	9.	#175	Video 5 -	Video Rene
Simonetti	E.	4.	#220	Comun. 1	LUTS E IPB
Sofer	M.	2.	#239:	Comun. 2	Urolitiasi Ed Incontinenza Urinaria
Sorrentino	V.	2.	#170	Comun. 4 -	Tutto Rene
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Sortino	G.	1.	#265:	Comun. 7 -	Andronews
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Spagni	M.	6.	#217	Video 1	Ricostruire Dentro: La Vescica
Spatafora	S.	6.	#217	Video 1	Ricostruire Dentro: La Vescica
Stanislao	I.	6.	#285	Comun. 3	Bladder Destiny
Stern	K.	2.	#239:	Comun. 2	Urolitiasi Ed Incontinenza Urinaria
Stork	B.	8.	#148:	Comun. 2	Urolitiasi Ed Incontinenza Urinaria
Summonti	D.	6.	#248	Comun. 4 -	Tutto Rene
Summonti	D.	13.	#305	Comun. 5 -	Ca Prostatico: Diagnostica E Terapia
Summonti	D.	8.	#249	Comun. 7 -	Andronews
Summonti	D.	9.	#293	Comun. 7 -	Andronews
Tanidir	Y.	2.	#239:	Comun. 2	Urolitiasi Ed Incontinenza Urinaria
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Taverna	G.	2.	#169	Comun. 5 -	Ca Prostatico: Diagnostica E Terapia
Taverna	G.	14.	#141	Comun. 5 -	Ca Prostatico: Diagnostica E Terapia
Taverna	G.	1.	#137	Comun. 6 -	High Technology IPB
Taverna	G.	2.	#140	Comun. 6 -	High Technology IPB
Taverna	G.	1.	#147	Comun. 5 -	Ca Prostatico: Diagnostica E Terapia
Taverna	G.	4.	#168	Comun. 5 -	Ca Prostatico: Diagnostica E Terapia
Tema	G.	10.	#262:	Comun. 2	Urolitiasi Ed Incontinenza Urinaria
Tema	G.	1.	#167:	Comun. 3	Bladder Destiny
Tema	G.	2.	#266	Comun. 3	Bladder Destiny
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Toia	G.	12.	#144	Comun. 4 -	Tutto Rene
Toia	G.	1.	#147	Comun. 5 -	Ca Prostatico: Diagnostica E Terapia
Toia	G.	2.	#169	Comun. 5 -	Ca Prostatico: Diagnostica E Terapia
Toia	G.	4.	#168	Comun. 5 -	Ca Prostatico: Diagnostica E Terapia
Toia	G.	14.	#141	Comun. 5 -	Ca Prostatico: Diagnostica E Terapia
Toia	G.	1.	#137	Comun. 6 -	High Technology IPB
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Tuderti	G.	2	#173	Video 1	Ricostruire Dentro: La Vescica
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Tuderti	G.	7.	#182	Comun. 4 -	Tutto Rene
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Tuderti	G.	8.	#163	Comun. 5 -	Ca Prostatico: Diagnostica E Terapia
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<b>Tuderti</b>	G.	10.	#177	Comun. 5 -	Ca Prostatico: Diagnostica E Terapia
<b>Tuderti</b>	G.	11.	#180	Comun. 7 -	Andronews
<b>Tuderti</b>	G.	1.	#174	Video 5 -	Video Rene
<b>Tuderti</b>	G.	2.	#171	Video 5 -	Video Rene
<b>Tuderti</b>	G.	3.	#172	Video 5 -	Video Rene
<b>Tuderti</b>	G.	3.	#172	Video 5 -	Video Rene
<b>Tuderti</b>	G.	9.	#175	Video 5 -	Video Rene
<b>Ughi</b>	G.	3.	#301	Comun. 4 -	Tutto Rene
<b>Vavassori</b>	I.	5.	#226	Comun. 6 -	High Technology IPB
<b>Veccia</b>	A.	7.	#182	Comun. 4 -	Tutto Rene
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<b>Vota</b>	P.	4.	#168	Comun. 5 -	Ca Prostatico: Diagnostica E Terapia
<b>Vota</b>	P.	14.	#141	Comun. 5 -	Ca Prostatico: Diagnostica E Terapia
<b>Vota</b>	P.	1.	#137	Comun. 6 -	High Technology IPB
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<b>Zaccaro</b>	B.	14.	#313:	Comun. 2	Urolitiasi Ed Incontinenza Urinaria
<b>Zanoni</b>	M.	3.	#145	Comun. 1	LUTS E IPB
<b>Zanoni</b>	M.	12.	#144	Comun. 4 -	Tutto Rene
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<b>Zanoni</b>	M.	4.	#168	Comun. 5 -	Ca Prostatico: Diagnostica E Terapia
<b>Zanoni</b>	M.	14.	#141	Comun. 5 -	Ca Prostatico: Diagnostica E Terapia
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