Serbian Medical Association
Urological Section of Serbian Medical Association
Serbian Academy of Sciences and Arts
European School of Urology

The 1st National Congress of the Urological Section of Serbian Medical Association and Regional Joint Meeting

**with ESU Course on urolithiasis*

September, 28-30th, 2017
Belgrade, Serbia

PROGRAM AND ABSTRACT BOOK

The 1st National Congress of the Urological Section of Serbian Medical Association has been accredited by the NHC: Decision number 153-02-1697/2017-1; Record number A-1-2169/17
Lecture 13 points, Oral presentation 11 points, Poster presentation 9 points, Attendance 8 points
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PROGRAM BOOK

September, 28th, Exhibition Hall

11.00 **Registration**

SESSION I: BPH-LUTS
Chairs: D. Mladenov (BG), D. Librenjak (HR), M. Kordić (BiH), S. Sadović (BiH)

13.00 **OAB in men: Do we pay enough attention for their treatment?**
S. Milićević, Bosnia and Herzegovina

13.15 **Is free prostate-specific antigen better than total prostate-specific antigen in prediction of prostate volume in patiens with LUTS/BPE?**
D. Milićević, Bosnia and Herzegovina

13.30 **Minimally invasive treatment of BPH**
D. Mladenov, Bulgaria

13.45 **Thulium laser prostate surgery**
I. Kalchev, Bulgaria

14.00 **Transurethral resection of the prostate in 21st century**
Stojadinović, Serbia

14.15 **Transurethral resection of the prostate: between theory and practice**
V. Bančević, Serbia

14.30 **Pro et Contra: Bipolar TUR vs Greenlight laser for BPH**
Z. Krstanovski, Slovenia
M. Aćimović, Serbia

14.45 **Discussion**

15.00 **Lecture of the sponsor (Elpharma):**
Mono or combination therapy for BPH – dilemmas?

Coffee break 15 min

SESSION II: Penis and urethra
Chairs: R. Đinović (RS), I. Ignjatović (RS), I. Dechev (BG)

15.30 **The evolution of operative techniques in hypospadias repair**
M. Milosavljević, Serbia

15.45 **Failed hypospadias repair**
R. Đinović, Serbia

16.00 **Reconstruction of the urethra after failed hypospadias repair**
I. Kunz, Germany

16.15 **Hypospadia repair and urethral stenosis reconstruction**
O. Hadžiosmanović, Bosnia and Herzegovina

16.30 **Update on treatment of Peyronie's disease**
M. Aćimović, Serbia

16.45 **Elaborated anastomotic bulbomembranous urethral repair vs buccal graft in patients 2-5 cm urethral strictures**
I. Ignjatović, Serbia

17.00 **Two stage repair of panurethral stricture with bladder mucosa take out of with a da Vinci Robot**
D. Kroepfl, Germany

17.15 **Prognostic factors in penile cancer**
I. Dechev, Bulgaria

17.30 **Organ-sparing surgery for penile cancer**
U. Bumbaširević, Serbia

17.45 **Discussion**

18.00 **Lecture of the sponsor (Boston Scientific): Management of erectyle disfunction and incontinence after radical prostatectomy**

19.00 **Opening ceremony & wellcome cocktail**

21.00 **Faculty diner**
Restaurant *Stanica 1884*, Savski trg 2

September, 29th, Exhibition Hall

08.30 **Registration**

SESSION III: Bladder cancer
Chairs: A. Hinev (BG), S. Bajramović (BiH), D. Tomić (BiH)

09.00 **Sigma rectum pouch**
J. Hadži Djokić, Serbia

09.15 **Belgrade pouch**
P. Aleksić, Serbia

09.30 **Urodynamic characteristics of orthotopic urinary reservoirs**
I. Nikolić, Serbia

09.45 **Diagnostic value of a second transurethral resection for superficial bladder cancer**
D. Bašić, Serbia

10.00 **Clinical application of the serous-lined extramural tunnel technique in the construction of ileal neobladders and ureteral substitutes**
A. Hinev, Bulgaria

10.15 **Basic principles of contemporary immunotherapy for bladder cancer**
S. Vrbić, Serbia

10.30 **Immunotherapy of urothelial cancer-new era: checkpoint inhibitors**
H. Fajković, Austria

10.45 **Discussion**

Coffee break 15 min

SESSION IV: Prostate Cancer
Chairs: S. Milićević (BiH), H. Fajković (AT), O. Stankov (MK)

11.15 **MRI-targeted prostate biopsy: technique and results**
D. Kroepfl, Germany

11.30 **Active surveillance for prostate cancer**
M. Hiroš, Bosnia and Herzegovina

11.45 **Significance of serum testosterone in prediction of extracapsular extension of prostate cancer**
S. Bajramović, Bosnia and Herzegovina

12.00 **Is there a place for focal treatment of prostate cancer?**
I. Tomašković, Croatia

12.15 **Pelvic lymph node dissection in prostate cancer**
A. Hinev, Bulgaria

12.30 **Diagnostics of incontinence after radical prostatectomy**
D. Jeremić, Serbia

12.45 **Contemporary radiotherapy in the adjuvant and salvage treatment of prostate cancer after radical prostatectomy**
D. Mileusnić, Bosnia and Herzegovina

13.00 **PSMA PET scan in follow-up after primary therapy for prostate cancer**
M. Hartenbach, Austria

13.15 **CRPC m0, to treat or to wait?**
H. Fajković, Austria

13.30 **Laparoscopic management of failed urethrovesical anastomosis after extraperitoneal laparoscopic radical prostatectomy**
B. Shabani, Macedonia

13.45 **Discussion**

Lunch break 60 min

SESSION V: RCC

Chairs: M. Hiroš (BiH), I. Tomašković (HR), P. Aleksić (RS)

15.00 **Nephron sparing surgery for RCC - state of the art lecture**
C. Tulić, Serbia

15.15 **Evaluation and treatment of small renal masses**
H. Spahović, Bosnia and Herzegovina

15.30 **Surgical technique for the treatment of RCC with IVC tumor thrombus: tips, tricks and pitfalls**
Dj. Radak, Serbia

15.45 **Laparoscopy for RCC: our experience**
V. Sekulić, Serbia

16.00 T**he current role of lymph node dissection in the management of renal cell carcinoma**
J. Bogdanović, Serbia

16.15 **High risk RCC - is there adjuvant therapy**
Ž. Saratlija, Austria

16.30 **Our experience in kidney cancer treatment for period 2008-2017**
Davor Tomić, Bosnia and Herzegovina

16.45 **Pro et Contra: open vs laparoscopic nephrectomy for RCC**
C. Tulić, Serbia
M. Šitum, Croatia

17.00 **Discussion**

Coffee break 15 min

SESSION VI: Urolithiasis

Chairs: I. Saltirov (BG), A. Papatsoris (GR), S. Hajder (BiH)

17.30 **Novel single use digital flexible ureteroscopes**
A. Papatsoris, Greece

17.45 **PCNL in the treatment of renal stone disease: indications and techniques**
I. Saltirov, Bulgaria

18.00 **Endoscopic treatment of kidney stones, our experience in ureterorenoscopy and laser lithotripsy**
M. Kordić, Bosnia and Herzegovina

18.15 **Flexible ureterorenoscopy for treatment of upper urinary tract calculi: indications and limitations**
P. Marić, Serbia

18.30 **ESWL in the contemporary treatment of upper urinary tract stones**
S. Stavridis, Macedonia

18.45 **The best choice of treatment for extraction of ureteral DJ stent with massive incrustation proximal pig-tail (≥ 20 mm): PNL or RIRS/SWL?**
S. Hajder, Bosnia and Herzegovina

19.00 **Discussion**

19.15 **Lecture of the sponsor (Innventa Pharm): Urolitinn in prevention and therapy of urolithiasis**

September, 29th, Danube Hall

11.15 **Abstract session 1:**
RCC
Chairs: S. Omerović (BiH), J. Bogdanović (RS), D. Milićević (BiH)

12.00 **Abstract session 2:**
Female urology; Urolithiasis
Chairs: K. Petkova (BG), S. Hajder (BiH), J. Kovačević (BiH)

15.00 **Abstract session 3:**
Free topics
Chairs: S. Stavridis (MK), A. Kesić (BiH), I. Dechev (BG)

17.00 **Abstract session 4:**
Urothelial cancer; Prostate cancer
Chairs: M. Potić (RS), M. Hasanbegović (BiH), A. Hinev (BG)

20.00 **Gala dinner**
Restaurant *Stara Kapetanija,*
Kej Oslobođenja 8

September, 30th, Exhibition Hall

08.00 **Registration**

ESU course:
Recent developments in diagnosis and surgical treatment of urolithiasis
Chair: G. Giusti, Basiglio (IT)

09.00 **European School of Urology:**
A unique education opportunity for urologists
G. Giusti, Basiglio (IT)

09.05 **EAU Guidelines recommendations on Urolithiasis**
T. Tailly, Gent (BE)

09.20 **Metabolic evaluation:**
What a urologist should do in 2017
G. Giusti, Basiglio (IT)

09.40 **ESWL: The ultimate recommendations for optimal outcomes**
T. Tailly, Gent (BE)

09.55 **RIRS: Indications, Technique and Instrumentation**
G. Giusti, Basiglio (IT)

10.15 *Break*

10.45 **Holmium YAG Laser How does it work?**
G. Giusti, Basiglio (IT)

11.05 **Interactive case discussion**

11.35 **PCNL: Recent developments**
T. Tailly, Gent (BE)

11.55 **PCNL: Complications and management**
T. Tailly, Gent (BE)

12.15 **Interactive case discussion**

12.35 **RIRS tips and Tricks for specific circumstances**
G. Giusti, Basiglio (IT)

13.00 **Close**

13.15 **Awards ceremony**
Closing remarks
Take home messages

THE VENUE

Hotel Crowne Plaza
Vladimira Popovica 10,
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MAINTENANCE TIME

28th – 30th September, 2017

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8,8-9,2

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ABSTRACT BOOK

Abstract session 1: RCC

Chairs: S. Omerović (BiH), J. Bogdanović (RS), D. Milićević (BiH)

NEPHRON SPARING PROCEDURES IN SMALL RENAL MASS

C. Tulic
Clinic of urology - Clinical centre of Serbia, Unuversity of Belgrade

There is no more dilemma in modern urology about nephron sparing surgery as the best choice in small renal tumors treatment (T1a and T1b) with potential role in selected cases with T2a tumors.

Some of the major facts are:

1. In skillful hands is easy to perform
2. Very good bleeding controle
3. Excellent anatomo-surgical and functional outcome
4. Adequate oncology results and
5. Patients and surgeon satisfaction.

One of the clue arguments for nephron sparing procedures is preserving kidney parenchima as well as residual and global renal function without any harm to oncological outcome.

In last twenty years (1996 – 2016) at our institution 344 nephron sparing procedures were performed with vast majority of elective tumor surgeries.

COMPARISON OF COMPLICATIONS IN PATIENTS WITH LAPAROSCOPIC VERSUS OPEN RADICAL NEPHRECTOMY FOR RENAL CELL CARCINOMA

S. Stavridis[1], S. Saidi[1], O. Ivanovski[1], B. Shabani[1], V. Stankov[1], M. Mojsova[2], M. Srceva[2]
[1]*University Clinic of Urology Skopje, Macedonia*
[2]*University Clinic of Anesthesiology and Reanimation Skopje, Macedonia*

Objective: To evaluate the complication rate and clinical follow-up in patients treated for T1-T2 renal cell cancer by open or laparoscopic radical nephrectomy at the same institution.

Materials and Methods: We followed 78 patients in a period of 5 years– from 2011 to 2016 year, 48 patients underwent transperitoneal laparoscopic and 30 open radical

nephrectomy. The sex distribution was 46 female and 32 male patients. Cancer was found predominatly on the right side 52, versus 26 left sided tumors.

Results: There were no differences between the laparoscopic and open groups in age, sex ratio, duration of the operation and tumour diameter. Patients who underwent laparoscopic surgery had less blood loss (mean blood loss: 150 vs 300.mL), less need for transfusion, lower need for analgesic drugs, and shorter hospitalization (4 vs 7 days).

Conclusions: Laparoscopic radical nephrectomy for patients with T1-T2 renal cell carcinoma is a safe and reliable procedure that decreases hospitalization time and intraoperative blood loss, and in the same time guarantees exact and optimal cancer control as the open nephrectomy does.

Key words: renal cell carcinoma, radical nephrectomy, Laparoscopy

RENAL CELL CARCINOMA TUMOR THROMBUS IN THE RENAL VEIN AND INFERIOR VENA CAVA: SURGICAL TREATMENT AND FOLLOW-UP

S. Stavridis[1], O. Stankov, S. Dohcev, S. Saidi[1], V. Stankov[1], M. Mojsova[2], M. Srceva[2]
[1]University Clinic of Urology Skopje, Macedonia
[2]University Clinic of Anesthesiology and Reanimation Skopje, Macedonia

Introduction: There are different ways of inferior vena cava (IVC) reconstruction for locally advanced renal cell carcinoma (RCC). We evaluated our experience and describe a single-center experience of the surgical management of this kind of malignancies as well as the results of the follow up.

Methods: A retrospective review of nephrectomies performed between June 2005 and June 2011 showed 16 patients presenting with tumor thrombus extension into the IVC. Clinical characteristics, surgical technique and postoperative outcome were evaluated.

Results: In 279 radical nephrectomies performed in the 6-year period 16 were found to have IVC thrombus involvement. Ultrasonography, computed tomography (CT), and/or magnetic resonance imaging (MRI) were performed preoperatively. All of the 16 cases were in the pT3 stage, 8 of them had renal vein thrombus, 5 had infrahepatic thrombus while 3 had retrohepatic thrombus. The tumor thrombi were removed by means of digital extraction and digital extraction in combination with Fogarty embolectomy. IVC repair was done with lateral venorrhaphy in all cases. Hepatic mobilization and suprahepatic clamping were not necessary in the selected group. One patient died perioperatively. The mean follow-up period was 32 months postoperatively; 1 died of distant metastases 5 months after the operation, two patients died in the second year after the operation while 12 patients were disease free in the follow-up period.

Conclusions: Lateral venorrhaphy and primary repair with or without Fogarty embolectomy enable fast and efficacious management of complex cases of tumor extension, avoiding complicated caval reconstructions, and result in insignificant recurrence rate. These data are limited because of the very small number of patients, but we believe that nonmetastatic RCC with extension into the IVC is potentially curable and that different surgical techniques used for removal of the tumor thrombus are acceptable.

Key words: renal cell carcinoma, tumor thrombus, inferior vena cava

KONZERVIRAJUĆE OPERACIJE U LEČENJU TUMORA PARENHIMA BUBREGA

A. Skakić[1,2], I. Ignjatović[1,2] , J. Stanković[1,2], Lj. Dinić[1,2], M. Potić[1,2],
M. Mihajlović-Tosić[1,2], B. Vučković[3], A. Veljković[2], D. Bašić[1,2]
[1]Klinika za urologiju, Klinički centar Niš
[2]Medicinski fakultet, Univerzitet u Nišu
[3]Opšta bolnica "Dr Aleksa Savić" Prokuplje

Uvod i cilj: Rana radiološka dijagnostika pomoću ultrazvuka, kompjuterizovane tomografije i magnetne rezonance dovela je do češćeg otkrivanja tumora bubrega manjih dimenzija. Poštedna hirurgija bubrega se uglavnom izvodi kod manjih, dobro ograničenih tumora, sa jasnim planom resekcije. U zavisnosti od veličine i lokalizacije tumora može se uraditi enukleacija, enukleo-resekcija tumora ili parcijalna nefrektomija.

Metode: Učinjena je retrospetkivno-prospektivna studija bolesnika operisanih zbog tumora bubrega na Klinici za urologiju Kliničkog centra Niš u periodu od 2005-2017. godine. Kod pacijenata kod kojih je lokalizacija tumora bila pogodna (periferna lokalizacija, stadijuma pT1 najvećeg promera do 5cm) učinjena je konzervirajuća operacija bubrega.

Rezultati: Broj pacijenata operisanih radikalnom operacijom bio je 305 (86,6%), a poštednom 47 (13,4%). Postoji trend opadanja broja radikalnih, a porasta poštednih operacija, ali on nije statistički značajan. Najveći broj operisanih tumora konzervirajućom operacijom bio je u stadijumu T1 (32), a nešto manji u stadijumu T2 (15). Enukleacija je gotovo podjednako korišćena kao i parcijalna resekcija. Krvarenje je bilo signifikantno veće tokom poštednih nego kod radikalnih operacija. Učestalost postoperativnih komplikacija je statistički značajno veća kod poštedne u odnosu na radikalnu nefrektomiju.

Zaključak: Postoji manji broj pacijenata od očekivanog, kod kojih je učinjena poštedna hirurgija nego u razvijenim zemljama. Komplikacije kod konzervirajućih operacija su češće i ozbiljnije nego kod radikalne operacije.

Abstract session 2: Female urology; Urolithiasis

Chairs: K. Petkova (BG), S. Hajder (BiH), J. Kovačević (BiH)

RETROGRADE INTRARENAL SURGERY (RIRS) VERSUS MINIMALLY INVASIVE PERCUTANEOUS NEPHROLITHOTOMY (MINI-PNL) FOR THE TREATMENT OF RENAL STONES 10-20 MM

O. Gatsev, K. Petkova, I. Saltirov
Clinic of Endourology and SWL, Department of Urology and Nephrology, Military Medical Academy - Sofia

Introduction and objective: With the recent technological advances in endourology retrograde intrarenal surgery (RIRS) and minimally invasive percutaneous nephrolithotomy (mini-PNL) became an effective and safe alternative to extracorporeal shockwave lithotripsy in the treatment of kidney stones 10-20 mm. The objective of this study is to compare the efficacy and safety of RIRS and mini-perc in the treatment of renal stones sized 10-20 mm.

Material and Methods: A retrospective study of the medical records of 77 patients with kidney stones 10-20 mm, treated between January 2016 - March 2017, was performed. 35 patients (45.5%) underwent mini-PNL, and 42 (54.5%) - RIRS. Data on patients' preoperative characteristics, stone-free rates, operating times, intra- and postoperative complications were compared.

Results: Patients' preoperative characteristics were comparable between the two groups. The mean stone surface and stone size were significantly higher in the mini-PNL group (173.8 ± 58.6 mm2 vs 101.3 ± 65.3 mm2, p = 0.000; and 17.4 ± 2.6 vs 13.2 ± 3.4 mm, p = 0.000, respectively). The predominant stone location was renal pelvis in mini-PNL group, and renal pelvis or calyces – in the RIRS group. Stone free rate after single procedure didn't differ significantly (88.6% vs 88.1%; p=0.948, for mini-PNL and RIRS group, respectively). The auxiliary procedures rate was significantly higher in the RIRS group due to the need for postoperative stent extraction (p=0.000). Mean hospital stay was shorter in the RIRS group (2,7±1,7 days vs. 4,5±1,0 days, p=0,000, respectively). There were no statistically significant differences in the mean operative time and intra- and postoperative complications rate between the two groups.

Conclusion: The results of this study suggest that both mini-PNL and RIRS are highly effective and safe methods for the treatment of renal stones sized 10-20 mm. Mini-PNL has the advantage of higher stone-free rate after a single procedure with comparable to RIRS postoperative complications rate. RIRS had the disadvantage of higher auxiliary procedure rate due to the need of postoperative stent extraction.

INITIAL EXPERIENCE WITH THE THIRD GENERATION SUBURETHRAL SLING „TVT SECUR"

N. Medojevic, I. Ignjatovic, D. Basic
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Introduction: Initial experience with the third generation suburethral sling "TVT secur" not as good as it was expected N. Medojevic *, I. Ignjatovic, D. Basic, Clinical Center Nis, Urology, Nis, Serbia Introduction and Objectives: Stress urinary incontinence (SUI) is a common clinical problem, that is successfully solved with tension free tapes suprapubic or transobturatory. Complications although infrequent, could be life threatening, during the placement of TVT. Residual symptoms after TOT are also common. Residual symptoms deteriorate postoperative quality of life regardless excellent results regarding continence rate (80–90%). The idea of third generation sling is to make surgery less traumatic (single incision), and to pass the shortest possible way in the body and, so minimize tissue trauma and the risk of complications.

Material and Methods: During 2015–2016, sixteen patients with clinically confirmed SUI were operated. "TVT secur"-third generation sling (Johnson & Johnson, Gynecare, Somerville NJ, USA) was used, and placed with "U" technique. The main criteria for patient selection were: clinically confirmed SUI, urethral hypermobility (Qtip >30 degrees) and negative "Barrier" test, The bladder function was confirmed with basic urodynamic data before the surgery (voiding dairy, first sensation, bladder capacity, and compliance on dynamic urethrocystoscopy). There was no significant pelvic organ prolapse. Symptom evaluation was performed with ICIQ/SF questionnaire before and after the surgery. Follow up time was between three and fifteen months (mean 8.3 months).

Results: All patients were operated in LMA (laryngeal mask airway) anesthesia. Time of surgery was progressively. shortened from 24.5 minutes, to 19.6minutes. Continence was achieved in 13 out of 16 patients (81.2%). Intraoperative complications were: unintended displacement of the sling (1–7.7%) and bleeding (1–7.7%). Temporary urinary retention occurred in one case (7.7%). Symptom score measured with ICIQ/SF was significantly improved (p-0.000). There was no postoperative urgency. Postoperative hospital stay was 1.4 days.

Conclusions: Initial success rate with "TVT secur", in a selected group of patients is high but not as high as we have experienced with TVT and TVT-O. Problem that remains is success rate in cases with SUI and ISD. Safety and short term tape efficiency are the most important problems we are dealing with. It seems that group of patients that are convenient for "TVT secur" must to be more strictly defined. Although complication rate is lower, in comparison with TVT(TOT), this sling type surely must pass the test of time.

RETROGRADE INTRARENAL SURGERY (RIRS) VERSUS SHOCKWAVE LITHOTRIPSY (SWL) FOR THE TREATMENT OF RENAL STONES 10-20 MM

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Introduction and objective: Extracorporeal shockwave lithotripsy (SWL) and retrograde intrarenal surgery (RIRS) are both highly effective treatment methods for renal stones sized up to 20 mm. The objective of this study is to compare the efficacy and safety of SWL and RIRS for the treatment or renal stones 10-20 mm.

Material and methods: The medical records of 102 patients with renal stones 10-20 mm, treated between January 2016 and March 2017 were retrospectively reviewed. 60 patients (58.8%) underwent SWL and 42 (41.2%) – RIRS. Data on patients' preoperative characteristics, stone-free rates, operating times, intra- and postoperative complications were compared.

Results: There were no statistically significant differences in patients' preoperative characteristics, except for mean stone surface, which was significantly higher in the RIRS group (101.4±65.3 mm2 vs 72.0±34.0 mm2, p=0.004). Stone-free rates after a single procedure were comparable between groups (88.1% and 75.0%; p=0.101, respectively, for RIRS and SWL). Mean operative time was significantly longer for the RIRS- group (62.5±21.8 min vs 50.5±10.8 min; p=0.000). Retreatment rates were higher for the SWL group (2.4% vs 13.3%; p=0.055, respectively). Residual fragments were treated with SWL in 4 patients of the RIRS group (9.5%) and with RIRS in 5 patients of the SWL group (8.3%) (p=0.010). Auxiliary procedures rate was significantly higher in the RIRS group due to the need for postoperative stent extraction (p=0.000). Postoperative complication rate was higher in the RIRS group (p=0.042), with the most common complications for RIRS being fever (7.1%) and for SWL – renal colic (6.7%).

Conlcusion: The results of this retrospective study suggest that both RIRS and SWL are effective and safe treatment methods for renal stones 10-20 mm. SWL is noninvasive, has a shorter operative time, but higher rates of retreatment procedures for residual fragments. RIRS has a higher stone-free rate after a single procedure, but is associated with more morbidity and higher auxiliary procedure rate due to the need of postoperative stent extraction.

TENSION FREE VAGINAL TAPE (TVT) VS TRANSOBTURATOR TAPE (TOT) KOMPLIKACIJE I ISHOD

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Uvod: Stres urinarna inkontinencija se tretira plasiranjem TVT i TOT. Tehnika plasmana TVT-a može biti povezana sa većim brojem neželjenih komplikacija. Cilj studije je da analizira i uporedi ishod i učestalst komplikacija TVT i TOT u tretmanu stres urinarne inkontinencije.

Metode: Prospektivna studija je izvedena na 64 pacijentkinje sa izolovanom stres urinarnom inkontinencijom (SUI) validovanom kroz primenu Urogenital Distress Inventory (UDI-6), Incontinence Impact questionnaire (IIQ-7) i International Continence Impact Questionnaire (ICQ5-SF) upitnika. Intraoperativne i postopretivne komplikacije su notirane i međusobno komparirane. Bolesnice su smatrane izlečenim ukoliko je stres test bio negativan i nije bilo potrebe za dodatnim hirurškim tretmanom u periodu praćenja od mesec dana i nakon tri meseca.

Rezultati: Rezultati izlečenja TVT 26/30 bolesnica (86,6%) i TOT 30/34 bolesnica (88,2%) se mogu smatrati komparabilnim. Viši stepen učestalosti komplikacija kao što su krvarenje, perforacija bešike, bol i dispareunija zabeležen je u TVT grupi. Kvalitet života na osnovu upitnika pokazao je značajno poboljšanje kvaliteta života u obe grupe.

Zaključak: Kod svih bolesnica tretiranim TVT i TOT rezultati izlečenja su komparabilni u tretmanu stres urinarne inkontinencije. TOT je jednako efektivan u tretmanu stres urinarne inkontinencije ali zadržava značajno manji stepen komplikacija.

HISTOLOŠKE KARAKTERISTIKE TKIVNOG URASTANJA U POLIPROPILENSKE MATERIJALE KOJI SE KORISTE U TRETMANU STRES URINARNE INKONTINENCIJE I PROLAPLSA ORGANA MALE KARLICE KOD ŽENA

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Uvod: Polipropilenski materijali koji se koriste u tretmanu stres urinarne inkontinencije i prolapsa organa male karlice kod žena se strukturno razlikuju uzrokujući na taj način i različit tkivni odgovor kao i stepen ćelijske inkorporacije. Struktura kao i količina sintetskog materijala direktno utiču na sam ishod operativnog tretmana kao i učestalost komplikacija.

Cilj rada je komparirati histološke karakteristike tkivnog urastanja u šest tipova sintetskih materijala koji se koriste u uroginekologiji.

Materijal i metode: Šest vrsta sintetskih materijala koji se koriste u uroginekologiji je korišćeno za reparaciju prenjeg defekta trbušnog zida Vistar pacova. Nakon tri i šest nedelja histološki uzorci su analizirani po žrtvovanju životinja. Nakon tri nedelje analiziran je i kompariran broj i raspored inflamatornih ćelija dok je nakon šest nedelja konzistencija struktura i količina kolagena koji je deponovan takođe komparirana.

Rezultati: Monofilamentni polipropileni generalno uzrokovali su niži stepen inflamatorne reakcije sudeći po broju inflamatornih ćelija koje su evidentirane. Najniži stepen inflamatorne reakcije je zabeležen kod semiresorptivnog monofilamentnog polipropilena. Multifilamentni polipropileni su uzrokovali inkapsuliranje miltifilamentoznih snopova sa restriktivnim urastanjem interfilamentozno. Nakon šest nedelja multifilamenti su za razliku od monofilamenata beležili manju organizaciju kolagena uz nepravilnije deponovanje kolagena u masama.

Zaključak: Monofilamentni polipropileni uzrokovali su manji stepen inflamatorne reakcije u odnosu na multifilamentne nakon tri nedelja. Nakon šest nedelja kolageni depoziti monofilamenata su bili dovoljni za tkivno ojačanje dok je kod multifilamenata dolazilo do deponovanja u masama sa restriktivnim interfilamentoznim deponovanjem kolagena.

SELF-CREATED TRANSOBTURATOR TAPE TREATMENT OF STRESS URINARY INCONTINENCE WITHOUT PRIOR URODYNAMIC INVESTIGATION

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Objectives: The purpose of this study was to evaluate and compare the results of tension free self-created transobturator tape (SCTOT) with the standard industrially created transobturator tape (ICTOT) in the treatment of stress urinary incontinence (SUI).

Study design: A prospective study of the treatment of SUI with SCTOT (67 patients) and ICTOT (47 patients) was performed. SCTOT was created from polypropylene mesh and monofilament sutures. The symptoms were evaluated before and after the surgery with the following: the Incontinence Impact questionnaire (IIC-7), the urogenital distress inventory (UDI-6), and the International Continence impact questionnaire short form (ICIQ5-SF). The overactive bladder symptom score (OABSS) was used to classify patients in the SUI or the mixed urinary incontinence (MUI) group. The follow up period was 18 months. Cure was defined as a negative stress test and no need for additional surgery.

Results: Objective cure was achieved in 56/67 (83.5%) participants in the SCTOT group and in 40/47 (85.1%) participants in the ICTOT group (p>0.05). There was a significant improvement in IIC-7, UDI-6, ICIQ5-SF and OABSS in both groups. Improvement was better in the group with pure SUI than in patients with MUI, but this difference was not significant. Postoperative infection occurred in 5/67 (7.4%) participants and in 5/47 (10.6%) patients in the SCTOT and the ICTOT group, respectively. De novo overactive bladder symptoms occurred in 4/67 (5.9%) of the participants in the SCTOT group and in 3/47 (6.3%) of the patients in the ICTOT group. Operating time was longer in patients with SCTOT compared to those with ICTOT.

Conclusion: The results of the treatment with SCTOT are not inferior to the results of the treatment with ICTOT and other results reported in the literature.

THE ROLE OF PROLOM WATER IN LITHOGENESIS

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Introduction and aim: Prolom water represents alkaline sodium hydro carbonic oligomineral homeotherms, with a pH value of 9,1 and alkaline reaction. Mineralization is 0,1913 gr/l and dry residue at 180 degrees is 0,158 gr/l. The chemical pattern is made of cations among which dominate ions of Sodium, representing 91,6911 milival%, while anions of hydro carbonate representing 84,0443 milival%.

Methods: A prospective study encompassed 280 patients, threated in Prolom Spa, between March 2013 and December 2016. The study was focused on: levels of Mg, Ca, uric acid in serum; levels of Mg, Ca, urate, in urine; ultrasound examination of kidneys. Analyses are performed at three time periods, zero-day, 7th and 14th day from first-morning urine and serum.

Results: Average value of $Ca^{"}$ concentration in serum was: 2,24mmo/L at day 0 (SD=0,083), 2,312mmol/L at day 7th (SD=0,114) and 2,242 mmol/L at day 14th (SD=0,119). Average value of urate concentration in urine within all patients was: 0,881mmol/L at 0 day (SD=0,267), 1,6mmol/L at 7th day (SD=0,654) and 1,9mmol/L at 14th day (SD=0,722). Prolom water statistically increases excretion of uric acid comparing time 1 to 2 as well as time 1 to 3, p<0,05. Average pH of urine was: 6,3 at 0 day (SD=0,6), 5,9 at 7th day (SD=0,92) and 6,8 at 14th day (SD= 0,6).

Conclusion: By intake of 2-3 liters of Prolom water, optimal diuresis is achieved with a specific weight of urine within the range of 1005-1015. Prolom water significantly increases Mg ions, as an inhibitor of crystallization, within the reference range for urine.

Also, it prevents crystallization or inhibits nucleation CaOx and CaP binding itself for an ion of Ca (70%); it increases the excretion of Ca ions and urats within the reference range of urine. Alcalization of urine up to pH 6,8 supports better solubility and excretion of urats and cystine in the urine. Prolom water has increased the excretion of acid uric comparing time 1 and 2 as well as time 1 to time 3, $p<0,05$. Prolom water, as an independent factor has high degree of anti-lithogenicity on urolithiasis.

JATROGENE POVREDE URETERA KOD GINEKOLOŠKIH OPERATIVNIH PROCEDURA: NAŠE ISKUSTVO

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Uvod i cilj: Jatrogene povrede uretera javljaju se kod različitih abdominopelvičnih i retroperitonealnih hirurških intervencija. Najčešće nastaju u toku ginekoloških operativnih zahvata. Cilj naše studije je ispitivanje učestalosti i vrste jatrogenih povreda uretera nastalih tokom ginekolo**ških intervencija**, kao i evaluacija i razmatranje efekata primenjenih dijagnostičkih i terapijskih procedura.

Metode: Retrospektivnom analizom kliničkih podataka (istorija bolesti i operativni protokoli) za period od 1998 – 2014. godina, registrovano je ukupno 30 pacijentkinja sa verifikovanom jatrogenom povredom uretera.

Rezultati: Mehanizmi povređivanja bili su: inkompletna transekcija (n=20), kompletna transekcija (n=7), ligacija (n=7). Najčešće dijagnostičke metode u postoperativnoj identifikaciji ureteralnih povreda nastalih nakon ginekoloških operacija su: abdominalna ehosonografija, ekskretorna urografija, anterogradna pijeloureterografija i retrogradna ureteropijelografija. Rane terapijske procedure (sutura uretera, DJ stent, perkutana nefrostomija, ureterocistoneostomija), primenjene su kod 14 (42,4%), dok su kasne (ureterocistoneostomija, nefrektomija, zamena segmenta uretera segmentom ileuma) primenjene kod 19 (57,6%) pacijentkinja.

Zaključak: U odnosu na sve operativne procedure koje mogu dovesti do jatrogene povrede uretera, ginekološke procedure predstavljaju najčešći uzrok. Promptna dijagnostika omogućuje hitnu operativnu restituciju uretera, uz niske stope morbiditeta. Ona predstavlja glavni faktor koji doprinosi uspehu lečenja i očuvanju bubrežne funkcije.

Abstract session 3: Free topics

Chairs: S. Stavridis (MK), A. Kesić (BiH), I. Dechev (BG)

ULOGA KOMPJUTERIZOVANE TOMOGRAFIJE U DIJAGNOSTICI RENALNE AV FISTULE I PRAĆENJU POSTTERAPIJSKOG UČINKA

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Uvod: Direktna komunikacija renalne arterije i vene naziva se renalnom arteriovenskom fistulom. Za razliku od AV malformata, koji je urođen, AV fistula se javlja kao posledica perkutane biopsije, drugih procedura, ili traume bubrega. Odlikuje se hematurijom, hipertenzijom ili srčanom insuficijencijom. Radiološka dijagnostika obuhvata kolor Doppler sonografiju, ekskretornu urografiju, kompjuterizovanu tomografiju, magnetnu rezonancu i angiografiju. Transkateterska arterijska selektivna embolizacija koja dovodi do razrešenja hematurije uz očuvanje renalnog parenhima je terapija izbora.

Prikaz slučaja: 33-godišnji muškarac dolazi lekaru sa bolom u desnom boku i povišenom telesnom temperaturom, bez prethodnih operacija i interventnih procedura na bubrezima. Nakon ultrazvučnog pregleda, u odsustvu uobičajenih kliničkih manifestacija, upućen je na kompjuterizovanu tomografiju, kojom je otkrivena arteriovenska fistula desnog bubrega komplikovana retroperitonealnim hematomom. CT pregled nakon embolizacije pokazao je da je AV fistula u potpunosti isključena iz cirkulacije.

Zaključak: U prikazanom slučaju kompjuterizovanom tomografijom je otkriveno da je AV fistula desnog bubrega uzrok bola u desnoj slabini i retroperitonealnog hematoma, koja je na kontrolnom CT pregledu jasno isključena iz cirkulacije. Kompjuterizovana tomografija je radiološka metoda koja omogućava brzu dijagnozu renalne AV fistule, pre svega zbog velike brzine samog pregleda, preciznosti prikaza anatomskih detalja i funkcionalnih informacija, koje se dobijaju tehnikom spiralnog skeniranja uz upotrebu kontrastnog sredstva i brojnim tehnikama rekonstrukcije, a kako omogućava planiranje tretmana i jasno prikazuje postojeće komplikacije, predstavlja metodu izbora kako u dijagnostici tako i u praćenju terapijskog efekta.

Ključne reči: renalna arteriovenska fistula, kompjuterizovana tomografija, bubreg, retroperitonealni hematom

KOMPLIKACIJE PERKUTANE NEFROSTOMIJE

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Uvod: Perkutana nefrostomija je slikom vođeno (radioskopija, ultrazvuk, CT) perkutano postavljanje katetera u sabirni sistem bubrega. To je terapijska metoda čiji je osnovni cilj dekompresija urinarnog sistema u uslovima uroopstrukcije različite etiologije, a ujedno je i najčešće korišćena procedura u nevaskularnoj interventnoj radiologiji.

Perkutanom postavljanju nefrostome pristupa se u skladu sa propisanim indikacijama, nakon procene i pripreme pacijenta, primenom odgovarajuće tehnike pod vođstvom izabrane slikovne metode. Neophodno je imati u vidu ograničenja ove procedure kao i moguće komplikacije. Najčešće se kao komplikacije javljalju oštećenja parenhima, kolektorskog sistema i vaskularnih struktura bubrega (sa formiranjem perirenalnih kolekcija – urinoma i hematoma, hemoragijom i hematurijom, formiranjem AV fistule), nenamerne punkcije susednih organa (oštećenje dijafragme i pluća, punkcija kolona, jetre, slezine, velikih krvnih sudova), pogrešno postavljen kateter van pijelona/uretera (ekstravazacija kontrasta), i veoma retko mortalitet.

Zaključak: U rukama iskusnog lekara perkutana nefrostomija je lako izvodljiva, bezbedna i efikasna terapijska procedura. Iako je dugo u upotrebi i smatra se osvojenom metodom, imajući u vidu opisane komplikacije, perkutana nefrostomija je intervencija čije izvođenje treba poveriti samo onima koji poseduju potrebno znanje, poznaju tehnike izvođenja i imaju na raspolaganju slikovne metode pomoću kojih se intervencija izvodi.

Ključne reči: perkutana nefrostomija, komplikacije, urinom, hematom, hematurija, AV fistula, ekstravazacija

LOWER URINARY TRACT SYMPTOMS AND METABOLIC DISORDERS

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Introduction: To investigate the link between lower urinary tract symptoms (LUTS) and metabolic disorders.

Materials and Methods: This report results from working at KC Nis, Clinic of Urology. Results There are common pathophysiological determinants for the onset of LUTS and the metabolic syndrome (MetS). Both conditions are multifactorial, related to disorders in circadian rhythms and share common risk factors. As in men with erectile

dysfunction, these potentially modifiable lifestyle factors may be novel targets to prevent and treat LUTS. The link between LUTS and metabolic disorders is discussed by using sleep, urine production and bladder function as underlying mechanisms that need to be further explored during future research. Conclusion Recent findings indicate a bidirectional relationship between LUTS and the MetS. Future research has to explore underlying mechanisms to explain this relationship, in order to develop new preventive and therapeutic recommendations, such as weight loss and increasing physical activity. The second stage is to determine the effect of these new treatment approaches on the severity of LUTS and each of the components of the MetS.

INCIDENTAL MISPLACEMENT OF PERCUTANEOUS NEPHROSTOMY TUBE IN VENA CAVA DURING THE TREATMENT OF ISOLATED RENAL PELVIS INJURY DUE TO HYDRONEPHROSIS CAUSED BY POSTIRRADIATON URETERAL STRICTURE

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An isolated blunt injury of the renal pelvicalyceal system is an uncommon type of blunt renal trauma and mainly occurs as a consequence of the pre-existing hydronephrosis due to distal ureteral obstruction. Percutaneous nephrostomy (PCN) is a safe and efficient procedure for preliminary temporary urinary diversion and rarely followed by serious complications. In our case, PCN was misplaced in the inferior vena cava during the preliminary drainage. We conducted an open surgery procedure where PCN was removed under strict vascular control, while ureteral reimplantation with DJ stenting was simultaneously performed.

PRIMENA TRANEKSAMIČNE KISELINE KOD UROLOŠKIH BOLESNIKA KORIST ILI RIZIK

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Uvod: Traneksamična kiselinaTXK antifibrinolitik predstavlja deo terapijskog postupka koji se primenjuje kod uroloških bolesnika u hirurgiji prostate. Smatra se da postoperativni gubitak krvi kod uroloških bolesnika nakon operacija na prostati je povezan sa porastom urinarne fibrinolitičke aktivnosti.Traneksamična kiselina predstavlja snažan inhibitor aktivatora plazminogena I urokinaze. Predstavlja supstancu male molekulske mase koja se izlučuje nepromenjena preko bubrega. Može se primeniti oralno i intravenski. Istraživan je efekat koristi u terapeutskom smislu TXK kod krvarenja u urinarnom sistemu i nastanak tromboemboliskih komplikacija kod bolesnika sa značajnim faktorima rizika za nastanak tromboembolijskih komplikacija.

Materijali i metode: Praćeno je 60 bolesnika podeljeljnih u dve grupe. U prvoj grupi su bili bolesnici sa visokim rizikom za nastanak tromboembolijskih incidenata a drugu grupu sačinjavali su bolesnici sa niskim rizikom za nastanak tromboze dubokih vena i plućne tromboembolije. Svi su bolesnici anesteziološki evaluirani i prvu grupu činili su bolesnici kategorizovani u ASA 3 a drugu grupu sačinjavali su bolesnici ASA 1 i 2. Kod svih je primenjivana TXK preoperativno , intraoperativno i neposredno postoperativno. Doza koja je primenjivana iznosila je 15 mg po kg a ponovljene doze su iznosile 10 mg po kg tm. Svi bolesnici su 12 h pre operativne procedure imali trombo profilaksu niskomolekularnim heparinom.

Rezultati: U obe grupe nije bilo tromboembolijskih komplikacija. Rezultati studija iz 2008. i 2010. god. u vidu randomizovanih meta analiza razmatrajući farmakokinetički profil TXK potvrdile su da administracija TXK ne povećava mortalitet, ne doprinosi ishemiji miokarda kompromitujući koronarni protok ne pomaže u nastanku TDV pa samim tim I plućnu emboliju, moždani udar i akutno bubrežno oštećenje.

Zaključak: TXK kao terapijsko sredstvo smanjuje operativni gubitak krvi a samim tim I operativno vreme, kao i količinu tečnosti u procedure ispiranja operativnog prostora. Ovo sve omogućuje i manje mogućnosti za nastankom ukrštene intrahospitalne infekcije. TXK ima potpuno siguran i bezbedan farmakološki profil.

RECONSTRUCTION OF URETHRAL STRICTURES IN PATIENTS WITH A LONG HISTORY OF BLIND URETHRAL DILATATION

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Purpose: To compare urethral reconstructions in patients after several years with or without blind urethral dilatation.

Materials and methods: A retrospective study of 107 patients with urethral reconstructions was performed. Sixty patients with a long history of blind urethral dilatation (group 1) were compared with 47 patients without prior dilatations (group 2).

Results: The type of surgery planned according to urethrography and endoscopy findings was appropriate in 37/60 (61.6%) patients in group 1 and in 39/47 (83%) patients in group 2($P < .03$). Anastomotic repairs were more frequent among the patients in group 2 ($P < .001$). Eighty five out of 107 patients were available for the 24 months follow-up. The success rate was higher in group 2 (91.4%) than patients in group 1 (70%) ($P < .04$). The greatest improvement in symptoms and quality of life occurred three months after the surgery ($P < .05$). Postoperative infection was persistent in 20/107 (18.7%) patients.

Conclusion: Urethral strictures with a long history of blind dilatation are separate entity. They are more difficult to image, require more augmentation and staged procedures and have a lower success rate.

THE EFFECT OF DURATION OF WARM ISCHEMIA ON THE OCCURRENCE OF EARLY SURGICAL COMPLICATIONS OF KIDNEY TRANSPLANTATION FROM A LIVING DONOR

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Introduction: We analyzed 67 patients who underwent a kidney transplant from a living related donor at the Clinical Centre Nis in the clinical retrospective study, in the period from 2007-2013. The study was concentrating on the duration of warm ischemia and the frequency and type of early surgical complications in the examined groups.

Materials and Methods: Patients were divided into two groups: Group A recipients (N-26), where warm ischemia lasted less than one minute. Group B recipients, (N-41), where warm ischemia lasted longer than one minute

Results: 16 (23.88%) patients, had an early surgical complication where 8 (11.9%) were of vascular origin and 7 (10.44%) were of urologic origin. In Group A significantly more urinary complications occurred (25%) in relation to the complications of vascular origin, which occurred in 5% of the recipient. Significantly more vascular complications (16.67%), compared to the urological (2.78%), occurred in Group B.

Conclusion: In the test groups, where a warm ischemia duration was up to one and more than one minute, on the basis of the presented results, we conclude that these periods of warm ischemia, with the duration below 30 minutes, does not represent a risk factor for early surgical complications after renal transplantation.

DA LI SE MOŽE POBOLJŠATI KONTROLA KRVARENJA IZ DORZALNOG VENSKOG KOMPLEKSA KOD OTVORENE RADIKALNE RETROPUBIČNE PROSTATEKTOMIJE PRIMENOM DODATNIH INTRAOPERATIVNIH MANEVARA - ISKUSTVO JEDNOG UROLOGA

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Uvod: Jedna od najčešćih i najozbiljnijih komplikacija za vreme otvorene radikalne retropubične prostatektomije (ORRP) je krvarenje iz dorzalnog venskog kompleksa (DVK). Cilj ovog rada je bio da prikažemo iskustvo jednog urologa koji je koristio dodatne operativne manevre kako bi smanjio krvarenje iz DVK za vreme izvođenja ORRP.

Materijal i metode: Retrospektivnom analizom je obuhvaćeno 218 bolesnika kojima je urađena ORRP. Svi bolesnici su podeljeni u dve grupe. U prvoj grupi je bilo 57 bolesnika koji su operisani od strane urologa koji je koristio dodatna tri intraoperativna manevra u toku zbrinjavanja DVK, a u drugoj grupi je bio 161 bolesnik koji su operisani od strane ostalih urologa koji su suturirali DVK bez dodatnih manevara. Prvi manevar je podrazumevao plasiranje Benique dilatatora kroz uretru nakon presecanja dorzalnog venskog kompleksa i uretre. Drugi manevar kod krvarenja iz DVK je podrazumevao plasiranje Foley katetera kroz uretru nakon sekcije DVK, apeksa prostate i uretre u čiji balon je ubačeno 3-5ml fiziološkog

rastvora i blagu trakciju u pravcu spoljašnjeg uretralnog otvora. Treći manevar je podrazumevao povlačenje šava na DVK nakon njegovog plasiranja, sa umerenom tenzijom od strane drugog asistenta i kasnije eventualno njegovu fiksaciju za periostijum pubične kosti. Između dve grupe je učinjeno upoređenje srednjih vrednosti sledećih parametara: godina starosti, nivo PSA, volumena izgubljene krvi i vremena trajanja operativnog zahvata.

Rezultati: Nije zabeležena statistički značajna razlika između grupa u godinama starosti (grupa I: 65±5.3 god., grupa II: 62±4.6 god.), vrednostima PSA (grupa I: 12.4 ±3.9ng/ml, grupa II 11.4 ±2.3ng/ml) i dužini trajanja operativnog zahvata (grupa I: 171 ±24, grupa II: 191 ±28min). Prosečan volumen izgubljene krvi u drugoj grupi je bio 1310 ±773ml, a u prvoj je bio 815 ±265ml. Statistički značajno veći gubitak krvi je zabeležen u II grupi ($p<0.05$).

Zaključak: Korišćenje Benique dilatatora, trakcije šava na DVK sa umerenom tenzijom i trakcije Foley katetera kroz uretru sa ispunjenim balonom od 3-5 ml, su opravdani manevri u toku ORRP koji mogu značajno smanjiti krvarenje iz DVK.

REDAK SLUČAJ PRIMARNOG AMELANOTIČNOG MALIGNOG MELANOMA URETRE

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Uvod: Maligni melanom uretre je izuzetno redak tumor sa lošom prognozom. U literaturi je prikazano svega dvadesetak slučajeva primarnog melanoma uretre, a u petini prikazanih slučajeva tumor je bio amelanotičan, što značajno otežava postavljanje dijagnoze čak i patohistološkim pregledom.

Materijali i metode: U radu je prikazan slučaj pacijentkinje starosti 78 godina koja je upućena urologu zbog opstruktivnih smetnji pri mokrenju i tumorske promene u donjoj trećini uretre. Kliničkim pregledom uočena je nepigmentovana polipoidna promena dijametra 2.5cm koja zahvata meatus i distalni deo uretre. Uretrocistoskopskim pregledom utvrđena je parcijalna opstrukcija početnog dela uretre, dok je nalaz u mokraćnoj bešici bio uredan. Tumor je odstranjen parcijalnom resekcijom uretre.

Patohistološkim pregledom, uz primenu širokog spektra monoklonalnih antitela kako bi se definisao molekularni profil tumora, isključen je karcinom uretre. Detaljnim patohistološkim pregledom postavljena je sumnja na maligni melanom, iako je pigment melanin bio odsutan na svim tumorskim presecima. Tumorske ćelije su pokazale visoku reaktivnost za HMB-45 i MelanA, visoko specifične markere za melanom, na osnovu čega je postavljena patohistološka dijagnoza amelanotičnog malignog melanoma uretre.

Dermatološkim i oftalmološkim pregledom isključeni su primarni melanom kože i oka, čime je potvrđen primarni amelanotični melanom uretre.

Na kontrolnom pregledu 4 meseca postoperativno, utvrđen je multifokalni lokalni recidiv periuretralno, kao i bilateralna ingvinalna limfadenopatija. Pacijentkinja je odbila dalje hirurško lečenje, nakon čega nije bila dostupna za dalje praćenje.

Zaključak: Uprkos operativnom lečenju prognoza malignog melanoma uretre je u većini slučajeva loša, sa znatno nižom stopom preživljavanja u odnosu na druge maligne tumore uretre. S obzirom da pojava amelanotičnog melanoma predstavlja značajnu dijagnostičku poteškoću, od krucijalnog je značaja postavljanje sumnje od strane iskusnog patologa i potvrda specifičnim imunohistohemijskim markerima.

Ključne reči: uretra, maligni melanom, amelanotični

ZADESNA RUPTURA MOKRAĆNE BEŠIKE-PRIKAZ SLUČAJA

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Uvod i cilj rada: Mokraćna bešika je šuplji mišićni organ koji je dobro zaštićen od spoljašnje traume zbog svoje pozicije duboko iza kostiju male karlice. Traumatske povrede mokraćne bešike su izuzetno retke, i predstavljaju 0.87-1.6% svih tupih traumatskih abdominalnih povreda. Ove povrede su rezltat tupe ili prodorne traume. Do 90% traumatskih povreda mokraćne bešike je uzrokovano prelomima kostiju karlice. Rupture mokraćne bešike mogu biti intraperitonealne i ekstraperitonealne, samo 5-8% su kombinovane intra- i ekstraperitonealne rupture bešike . Ove povrede, bez osnovne frakture predstavljaju apsolutnu retkost. Pravovremena dijagnoza i odgovarajuća terapija utiču u značajnoj meri na postoperativni morbiditet. U ovom radu predstavljamo slučaj rupture mokraćne bešike usled delovanja tupe traume.

Prikaz slučaja: Pacijentkinja starosti 63 godine, se javila u Hitnu Službu OB Leskovac zbog bolova iznad suprapubične kosti koji se javljaju nakon pada preko ivice kade. U laboratorijskim nalazima povećan broj leukocita koji su iznosili 16,3, dok su ostali paramteri bili u granicama referentnih vrednosti. Pacijentkinja pregledana od strane hirurga, radiologa i urologa. Učinjena cistografija koja je pokazala izlivanje kontrasta u gornjem delu mokraćne bešike, koja je prikazana u obliku vretena.

Pacijetnkinja je operisana i učinjena je sutura mokraćne bešike. Postoperativni tok je bio uredan. Na kontrolnim cistoksopijama nakon godinu dana od operacije, nalaz na mokraćnoj bešici je bio uredan uredan nalaz.

Zaključak: Prikazani slučaj ukazuje na veliku verovatnoću uroloških povreda nakon tupih trauma abdomena ukoliko je mokraćna bešika puna, čak i u odsustvu fraktura kostiju karlice.

Abstract session 4: Urothelial cancer; Prostate cancer

Chairs: M. Potić (RS), M. Hasanbegović (BiH), A. Hinev (BG)

ENDOSCOPIC BIPOLAR TURIS RESECTION AND VAPORIZATION OF THE DISTAL URETER AND URETERAL ORIFICE DURING NEPHROURETERECTOMY FOR UPPER URINARY TRACT UROTHELIAL CARCINOMA

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Introduction and objective: Radical nephroureterectomy with resection of a bladder cuff remains the "gold standard" for the treatment of upper urinary tract urothelial carcinoma (UTUC). Several techniques have been proposed for distal ureter resection, including pluck technique, stripping, transurethral resection of the intramural ureter, and intussusception. Except for ureteral stripping, none of these techniques has been proved inferior to bladder cuff excision. The objective of this study is to present our initial experience with modification of the pluck technique – bipolar TURis resection and vaporization of the distal ureter and its orifice during nephroureterectomy.

Material and Methods: The medical data of 8 patients with UTUC treated with bipolar TURis resection and vaporization of the distal ureter and its orifice during nephroureterectomy from January 2016 and December 2016 were prospectively collected. Surgical technique included bipolar circular TUR is resection of the ureteral orifice from the bladder wall, followed by vaporization to prevent urine extravasation. After the endoscopic resection, a radical open nephrectomy is performed and the ureter is extracted through the pluck technique.

Results: Patients' mean age was 61,7±14,2 years. 4 patients (50%) had tumors located in the renal pelvis and 4 (50%) – in the ureter. In all patients the bipolar endoscopic resection of the ureteral orifice and the distal ureter was successfully performed and the whole ureter was extracted altogether with the kidney during the radical open nephroureterectomy, without evidence of urine extravasation from the ureter. Pathologic staging of the patients was pT3N0M0 in 3 patients, pT3N1M0 - in 1, pT2N0M0 – in 3 patients and pT4N0M0 – in 1 patient. Histologic grading was G2 in 4 patients and G3 - in 5 patients. There were no intra- and postoperative complications. For a mean period of follow-up of 4,2±2,68 months there were no local or bladder recurrences of the tumor.

Conclusions: Our initial results from the modification of the pluck technique through bipolar TURis resection and vaporization of the ureteral orifice and the distal

ureter is a safe procedure, which allows to reduce the surgical trauma during radical open nephroureterectomy. Further randomized comparative studies are needed to assess the long-term results of the technique.

PROGNOSTIČKI ZNAČAJ EKSPRESIJE EZH2 U RANO INVAZIVNOM T1 UROTELNOM KARCINOMU MOKRAĆNE BEŠIKE VISOKOG HISTOLOŠKOG GRADUSA

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Uvod: Urotelni karcinom bešike je najčešća maligna neoplazma urinarnog sistema. Rano invazivni urotelni karcinom (T1), kod koga postoji infiltracija lamine proprije zida mokraćne bešike, predstavlja značajan dijagnostički i terapijski problem. T1 tumori mokraćne bešike visokog histološkog gradusa danas se smatraju agresivnom i potencijalno smrtonosnom bolešću. EZH2 je transkripcioni represor koji igra značajnu ulogu u karcinogenezi urotelnih neoplazmi. Ispitivanja lekova koji blokiraju aktivnost EZH2 u lečenju nekoliko tipova sarkoma i limfoma već daju ohrabrujuće rezultate.

Cilj rada je da se ispita ekspresija EZH2 u rano invazivnom T1 urotelnom karcinomu mokraćne bešike visokog histološkog gradusa, njena korelacija sa kliničko-patološkim faktorima, kao i da se proceni uticaj ekspresije EZH2 u uzorcima tumora na prognozu bolesti, lečenje i preživljavanje pacijenata.

Materijali i metode: Uzorci tumora 127 pacijenata sa karcinomom mokraćne bešike (T1, high grade) dobijenih transuretralnom resekcijom na Klinici za urologiju Kliničkog centra Niš, u periodu 2009-2012. godine, analizirani su imunohistohemijski na ekspresiju EZH2. Ispitivanje korelacije sa kliničko-patološkim parametrima urađeno je u programu za statističku obradu podataka SPSS 20.0.

Rezultati: Visoka jedarna ekspresija EZH2 nađena je u 89 (70.1%) T1 tumora visokog gradusa. Visoka EZH2 ekspresija značajno je bila udružena sa ženskim polom (p=0.010) i kancer-specifičnim mortalitetom (p=0.004). U Kaplan-Majerovoj analizi preživljavanja, visoka ekspresija EZH2 bila je značajno udružena sa lošijom prognozom i kraćim preživljavanjem pacijenata (0.023). Statistički značajne korelacije nije bilo sa pojavom recidiva bolesti, vremenom do pojave recidiva, kao ni sa modalitetom primenjene terapije (p>0.05).

Zaključak: Imunohistohemijska ekspresija EZH2 u T1 urotelnom karcinomu visokog gradusa mokraćne bešike ukazuje na agresivno ponašanje tumora i lošiju prognozu. EZH2 bi se mogao koristiti kao prognostički marker u selekciji pacijenata koji zahtevaju intenzivniju pažnju lekara i ponovnu resekciju tumora, kako bi se isključila mišićno-invazivna bolest, kao i potencijalna terapijska meta.

SIGMA RECTUM POUCH, URINARNA DERIVACIJA - ISKUSTVO NA 20 SLUČAJEVA

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Uvod i cilj: Glavni napredak sigma rektum pouch procedure, kao urinarne derivacije posle radikalne cistektomije zbog karcinoma mokraćne bešike, je što se posle detubularizacije creva dobija rezervoar sa smanjenim pritiskom. Ovom procedurom se eliminišu i kontrakcije creva koje izazivaju visoki pritisak u rezervoaru. Ova metoda omogućava dobru zaštitu gornjh urinarnih puteva i kontinenciju. Operativna tehnika je jednostavna. Glavne indikacije za ovu zatvorenu urinarnu derivaciju su cistektomija zbog karcinoma mokraćne bešike, ekstrofija mokraćne bešike, ireparabilne vezikovaginalne fistule, intersticijalni cistitis ili može biti korišćena kod konverzije ureterosigmoidostomije ili kolon konduita. Originalnu tehniku su opisali Fisch i Hohenfellner 1991 godine, koristeći 8 cm rektuma i 12 cm sigmoidnog kolona. Cilj ovog rada je da ukaže na efikasnost i bezbednost sigma rectum pouch procedure kao urinarne derivacije posle totalne cistektomije.

Materijal i metode: Svih 20 pacijenata je operisano zbog infiltrativnog karcinoma mokraćne bešike, na odeljenju urologije Opšte bolnice u Leskovcu u periodu od januara 2002. do decembra 2016. godine. Preoperativna priprema je podrazumevala biohemijske analize, kompletnu krvnu sliku, analizu urina, sedimenta urina, urinokulturu, ultrazvučni pregled, cistoskopski pregled, transuretralnu resekciju tumora, rektoskopiju,intravensku pijelografiju, CT ili MRI abdomena i male karlice i merenje kompetentnosti analnog sfinktera. Rezultati patohistološkoh analiza su pokazivali stadijum bolesti od T2a do T3b.

Rezultati: Od ukupnog broja pacijenata 17 je bilo muškog a 3 pacijenta su bila ženskog pola. Najmlađi pacijent je imao 51 godinu a najstariji 85 godina starosti. Prosečan gubitak krvi po operaciji je iznosio 460 ml. Prosečno trajanje operacije je iznosilo 135 minuta. Uočene su tri rane postoperativne komplikacije u vidu produženog zarastanja rane. Postoperativni tok je trajao između četrnaest i dvadeset i jedan dan. Na kontrolnim pregledima su svi pacijenti bili kontinentni. U ovoj grupi pacijenata nije bilo smrtnih ishoda nakon izvršene operacije.

Zaključak: Na kraju, možemo zaključiti da Mainz-Pouch II predstavlja urinarnu derivaciju koja daje niske stope mortaliteta i morbiditeta. Procedura je jednostavna, sigurna i brza a kvalitet života pacijenata je zadovoljavajući.

PRELIMINARY RESULTS OF PROSTATE-SPECIFIC ANTIGEN ISOFORM P2PSA, AND ITS DERIVATIVES, %P2PSA AND THE PROSTATE HEALTH INDEX FOR DETECTING PROSTATE CANCER

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Objectives: Prostate-specific antigen (PSA) isoform p2PSA, and its derivatives, %p2PSA and prostate health index (phi) has shown valuable results in the detection of prostate cancer (PCa). The goal of the present prelininary study was to evaluate p2PSA, %p2PSA and phi in the detection of PCa.

Patients and methods: Our observational descriptive study cohort consisted of 30 consecutive patients who had tPSA values of 2–10 ng/ml and who had undergone ≥ 10 core prostate biopsies. Patients were prospectively recruited between May 2017 and August 2017 at our institution.

Results: Mean patient age was 63.8 yr (range: 51–80). Prebiopsy median tPSA, fPSA, and fPSA-to-tPSA ratio (f/tPSA) values were, respectively, 4.6 ng/ml (range: 2.03–9.85), 1.03 ng/ml (range: 0.29–2.57), and 20.6% (range: 8–44.5). Median p2PSA, %p2PSA, and PHI values were, respectively, 15.4 pg/ml (range: 5.8–33.3), 15.4% (range: 7.4–44.3), and 39.4 (range: 14.2–87.3). Prostate cancer was detected in 8 (26.7%) of men. The differences in the serum total PSA, free PSA and percent free PSA were not statistically significant between the cancer and noncancer groups. On the other hand, p2PSA (24.6 ± 7.8 versus 15.4 ± 7 pg/ml, p=0.005), %p2PSA (median, IQR, 26.9, 10.3 versus 14.4, 3.1, p=0.000), and phi (63.8 ± 13.7 versus 31.9 ± 8, p=0.000) were significantly higher in all PCa subcohorts. The cutoff values of p2PSA, %p2PSA and phi at baseline were 16.48, 16.39 and 48.48, respectively. The prostate volume was significantly greater statistically (p=0.003) in the noncancer than in the cancer groups (median, IQR, 64, 6.2 g versus 38, 12.2 g).

Conclusions: Our preliminary results confirm previous evaluations that p2PSA, %pPSA and phi represents a more cancer-specific form of PSA that better discriminates prostate cancer from BPH.

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Uvod: Jedna od najčešćih i najozbiljnijih komplikacija za vreme otvorene radikalne retropubične prostatektomije (ORRP) je krvarenje iz dorzalnog venskog kompleksa (DVK). Cilj ovog rada je bio da prikažemo iskustvo jednog urologa koji je koristio dodatne operativne manevre kako bi smanjio krvarenje iz DVK za vreme izvođenja ORRP.

Materijal i metode: Retrospektivnom analizom je obuhvaćeno 218 bolesnika kojima je urađena ORRP. Svi bolesnici su podeljeni u dve grupe. U prvoj grupi je bilo 57 bolesnika koji su operisani od strane urologa koji je koristio dodatna tri intraoperativna manevra u toku zbrinjavanja DVK, a u drugoj grupi je bio 161 bolesnik koji su operisani od strane ostalih urologa koji su suturirali DVK bez dodatnih manevara. Prvi manevar je podrazumevao plasiranje Benique dilatatora kroz uretru nakon presecanja dorzalnog venskog kompleksa i uretre. Drugi manevar kod krvarenja iz DVK je podrazumevao plasiranje Foley katetera kroz uretru nakon sekcije DVK, apeksa prostate i uretre u čiji balon je ubačeno 3-5ml fiziološkog rastvora i blagu trakciju u pravcu spoljašnjeg uretralnog otvora. Treći manevar je podrazumevao povlačenje šava na DVK nakon njegovog plasiranja, sa umerenom tenzijom od strane drugog asistenta i kasnije eventualno njegovu fiksaciju za periostijum pubične kosti. Između dve grupe je učinjeno upoređenje srednjih vrednosti sledećih parametara: godina starosti, nivo PSA, volumena izgubljene krvi i vremena trajanja operativnog zahvata.

Rezultati: Nije zabeležena statistički značajna razlika između grupa u godinama starosti (grupa I: 65±5.3 god., grupa II: 62±4.6 god.), vrednostima PSA (grupa I: 12.4 ±3.9ng/ml, grupa II 11.4 ±2.3ng/ml) i dužini trajanja operativnog zahvata (grupa I: 171 ±24, grupa II: 191 ±28min). Prosečan volumen izgubljene krvi u drugoj grupi je bio 1310 ±773ml, a u prvoj je bio 815 ±265ml. Statistički značajno veći gubitak krvi je zabeležen u II grupi ($p<0.05$).

Zaključak: Korišćenje Benique dilatatora, trakcije šava na DVK sa umerenom tenzijom i trakcije Foley katetera kroz uretru sa ispunjenim balonom od 3-5 ml, su opravdani manevri u toku ORRP koji mogu značajno smanjiti krvarenje iz DVK.

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