

($1.73 \pm 0.12 \times 10^{-3} \text{mm}^2/\text{s}$), was not found statistically different from the mean ADC values obtained from the normal bladder wall ($1.78 \pm 0.2 \times 10^{-3} \text{mm}^2/\text{s}$) ($p > 0.05$). A significant difference was determined between ADC values of benign lesions and the ADC values of malign lesions ($p < 0.001$).

Conclusions: According to cystoscopy, values of DW-MRI's related with sensitivity, specificity and accuracy of were found, respectively 90%, 93% and 91%. As the DW-MRI is a non-invasive and a rapid shooting technique, and does not contain ionized radiation and because it is accepted as an important marker of tumor cellularity, it may be used as an alternative in the diagnosis and follow-up of bladder tumor in future.

S157 TRUS- REVISITED IN THE DIAGNOSIS AND STAGING OF BLADDER CANCERS

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Introduction & Objectives: To evaluate the efficacy of cystoscopy, CT, and transrectal ultrasound (TRUS) imaging and cytology separately and together, in the diagnosis and staging of bladder cancer in comparison to pathological staging.

Material & Methods: An initial cystoscopy and washout cytology were performed to 206 patients with proven bladder cancer when they admitted to hospital. Tumor size and invasion degree was the study endpoints for the CT imaging. TRUS staging of the patients were performed in the day they were admitted to the hospital. An invasive tumor was characterized as disruption of bladder wall and perivesical invasion in TRUS imaging. All patients had standard TUR procedures. Pathological evaluation of the tumors were classified as either superficial (pTa) or invasive (pT1,2 or 3).

Results: Patients were divided into three categories according to tumor size observed in cystoscopy: 1. Tumor size < 1 cm (88 patients- 42.7%) 2. Between 1-3 cm (51 patients-24.8%) and 3. > 3 cm (67 patients-32.5%). CT imaging did not reveal any tumor in 78 patients (37.9%) but showed tumors of < 1 cm in 34 (16.5%), tumors between the sizes of 1-3 cm in 52 patients(25.2%) and tumors > 3 cm in 40 (20.4%). Of the patients, 170 had superficial (82.5%) and 36 invasive tumors according to the CT findings. TRUS evaluation revealed invasion in 46 patients (22.3%) and 160 (77.7%) were categorized as non-invasive. When a univariate analysis of variance is conducted separately for CT and TRUS, again keeping cystoscopy as the dependent variable, TRUS correlates in 68.5% of the cystoscopic findings whereas, this rate is 58.4% for CT and thus TRUS seemed to be a better imaging technique than CT in bladder tumor detection. When pathological findings and TRUS evaluation results are compared, sensitivity of TRUS in tumor detection was 77.4%, specificity 60%, positive predictive value (PPV) 94.7% and the negative predictive value was 22.2%.

Conclusions: Cystoscopy remains as the mainstay in diagnosis of bladder cancer patients. The combined use of all CT, TRUS and cytology results in a detection rate of 72% of the cystoscopically proven tumors. Among the three, TRUS has the highest correlation with cystoscopy. In staging of the bladder cancer tumors, both CT and TRUS have statistically significant correlation with pathology but TRUS results are clearly better than CT. TRUS can be valuable in both detection and staging of bladder cancer and this technique is very familiar to urologists, it has low cost and minimal morbidity and office based. We advise urologists to use TRUS in this fashion with these encouraging results.

S158 BODY MASS INDEX AND RADICAL CYSTECTOMY. DOES HIGH BODY WEIGHT INCREASE THE MORBIDITY OF THE PROCEDURE?

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Introduction & Objectives: Radical cystectomy is the gold standard treatment for muscle-invasive bladder cancer, the incidence of which is steadily increasing. The worldwide epidemic of obesity, that inadvertently affects the greek population, is associated with increased health hazard in oncologic patients. This study examines the impact of body mass index (BMI) on radical cystectomy.

Material & Methods: The study comprised 88 patients who underwent radical cystectomy with urinary diversion for bladder cancer from January 2007 to May 2010 in our department. Patient BMI was defined as normal less than 30 ($n=64$) or obese greater than 30 ($n=24$). Retrospective analysis was performed on the operative and immediate postoperative characteristics as well as on the oncological outcomes of the patients.

Results: There was no statistically significant difference between the two groups regarding the stage, the positive surgical margins and the type of the diversion. Operative time and blood loss as well as transfusions rates were significantly greater for obese individuals (median OR time 285 vs 190 min., blood loss 440cc vs 235 cc). Overall obese patients had a significant higher rate of thromboembolic and cardiopulmonary complications (20,8% vs 3,1%), wound infection (29,1% vs 7,8%) and longer hospital stay (approximately 3 days). No patient died within the first 30 days following surgery.

Conclusions: Increased BMI independently poses a greater perioperative risk to the patient and contributes to the technical challenge of the cystectomy. The increased perioperative risk associated with elevated BMI is significant but not prohibitive and should not preclude cystectomy as definitive treatment.

S159 RESULTS OF A RADICAL CYSTECTOMY IN INVASIVE FORMS OF BLADDER CANCER: ONE SURGEON'S EXPERIENCE IN FIRST YEAR AFTER FINISHING OF RESIDENCY

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Introduction & Objectives: During the period between March 2009 and May 2010, seven operations for invasive bladder cancer have been performed in our clinic. All patients were at stages beyond T2 at the preoperative stage: 6 (85.7%) - T3, 1 (14.3%) - T4a. Three (42.86%) patients experienced grade 3 hydronephrosis due to tumor invasion into the ureter. 3 (42.86%) patients had enlarged regional lymph nodes. 2 (28.6%) patients had concomitant lung pathology: emphysematous changes and chronic bronchitis.

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Results: All patients had shown radical cystectomy. During surgery, 6 (85.7%) patients were diagnosed with serious commissural changes which significantly hampered dissection. In 6 (85.7%) patients that underwent radical surgery, 1 (14.3%) due to adhesions of the prostate to the rectum the operation was a limited cystectomy. Although, there was histological confirmation of complete tumor removal in the margins of the healthy tissue, this patient was given radiotherapy and adjuvant chemotherapy. According to the histopathological study, 3 patients (42.86%) had metastases in regional lymph nodes, necessitating postoperative chemotherapy gemsitabin + cisplatin / carboplatin. In 1 patient after removal of the ureteral stent was observed, transient failure of ileo-ureteral anastomosis occurred. In another patient, due to violations of the prescribed treatment on the 8th day, we observed a developed insolvency ileo-ileal anastomosis, and on the 18th day - coagulopathy, which was treated within 18 hours. In all patients, except the last one, we marked positive dynamics in the postoperative period, recovered the ability to work, as well as improvement of the overall status as compared with the preoperative period.

Conclusions: Radical cystectomy, while voluminous, traumatic and potentially a risky operation, still retains the position of the operation of choice for invasive bladder cancer. Therefore, a team of surgeons who have experience in conducting such interventions, as well as implementing them in a specialized cancer center remains a vital necessity.

Poster Session 9 BPH

Saturday, 2 October, 09.40-11.20, Poster Room 1

S161 PHARMACOECONOMIC EVALUATION OF THREE DIFFERENT MEDICATIONS FOR LOWER URINARY TRACT SYMPTOMS ASSOCIATED WITH BPH: HERBAL EXTRACT VERSUS STANDARD DRUGS

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Introduction & Objectives: Lower urinary tract symptoms (LUTS) impair the quality of life of patients with BPH to a lesser or greater extent. Standard pharmacotherapy includes alpha-1 adrenergic antagonists and 5-alpha reductase inhibitors. Various herbal extracts are also used, including lipidoesteric extract of *Serenoa repens* (LESR). In comparison to standard drugs which are mostly widely investigated, there still haven't been the unique scientific opinion related to pharmacological properties and clinical efficacy of LESR, including pharmacoeconomic aspect, although it has been in use for centuries. The aim of our study was to assess the pharmacoeconomic aspect of three different medications for LUTS in patients with BPH.

Material & Methods: Our investigation was designed as an open-label, prospective and comparative clinical study which included 90 patients with mild/moderate uncomplicated symptomatic BPH who complied inclusion criteria. Patients were randomly classified in three groups of 30 patients. The first group (D) received

doxazosin (2mg/day), second group was treated with finasteride (F)(5mg/day) and the third group (SR) received LESR (320mg/day) during three months. All patients filled the IPSS questionnaire before and after medication. In order to evaluate the cost/effectiveness of applied medications we used internationally accepted pharmacoepidemiologic/pharmacoeconomic methodology with defined daily dose (DDD) as a measuring unit. Results were analyzed statistically.

Results: Twenty four patients from group D, 22 patients from SR group and 21 patients from F group came to the final assessment. During three months, they received 1890 DDDs of finasteride, 1080 DDDs of doxazosin and 1980 DDDs of LESR. The price of one DDD was approximately 0.10EUR for doxazosin, 0.35EUR for LESR and 0.80EUR for finasteride. The expenditure of whole treatment was 1512EUR for finasteride, 108EUR for doxazosin and 693EUR for LESR. Average values of the IPSS were significantly reduced compared to baseline values in D and LESR group ($p<0.01$), but didn't achieve statistically significant difference in F group ($p>0.05$). The price of the lowering of the IPSS for one point with doxazosin was 0.56EUR, LESR 6.36EUR and the most expensive reduction was with finasteride (29.08EUR).

Conclusions: Our results indicate that the best cost/effectiveness ratio in treatment of LUTS showed doxazosin and the worst result was related to finasteride. Pharmacoeconomic profile of LESR was five times better than of finasteride, but more than ten times inferior compared to doxazosin. The final decision concerning the conclusion about pharmacoeconomic profile of different types of pharmacotherapy implied the principal limitations of this study such as relatively short duration and subjective evaluation of symptoms. In this regard it is necessary to conduct the study of longer duration.

S162 PROGNOSTIC SCORING SYSTEM FOR INITIAL TREATMENT IN RETROPERITONEAL INFECTIONS

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Introduction & Objectives: Until now there has been no study that have derived a prognostic scoring system, that stratifies patient risk for adverse early outcomes in retroperitoneal infections. The aim of this study was to identify relevant prognostic factors and to generate and validate simple scoring system of early treatment failure, in patients with retroperitoneal infections.

Material & Methods: This study included 92 adult patients with 104 retroperitoneal infections. The group was randomly divided into the derivation (78 patients) and validation set (26 patients). Logistic regression and bootstrap methods were used to create an integer score for estimating the risk of early treatment failure using patient-related risk factors, severity of disease, bacterial etiology, type of pathology, and treatment-related factors.

Results: Early treatment failure was observed in 57 (54.8%) patients. The length of hospital stay and treatment complications were significantly longer and more frequently in patients with early treatment failure than in those with early success. Factors most strongly associated with unfavorable early treatment outcome included the early complete urological procedures, inadequate early antibiotic and severe clinical course. The resultant total possible score ranged from 0 to 22, with a cut-off value of 5 points. The scoring system was subsequently tested on the validation set, and it retained its predictive ability on this separate population of patient encounters.

Conclusions: Although created scoring system has good performance characteristics, the data required by the predictive model can be easily obtained and provide a possible intervention measure, further studies should be performed before widespread implementation.

S163 ASSESSMENT OF THE EFFECTIVENESS OF THE COMBINED TREATMENT OF PATIENTS WITH BENIGN PROSTATIC HYPERPLASIA AND OVERACTIVE BLADDER WITH PHYTOTHERAPY AND ANTICHOLINERGIC DRUG

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Introduction & Objectives: Benign prostatic hyperplasia (BPH) is one of the most common diseases of the lower urinary tract in men. It is indisputable fact that, in over 50% of the patients it is combined with overactive bladder, and thus the combined therapy is taking a leading role. We summarize our experience of treating those patients with the combined use of Serenoa repens extract and Trosipium chloride.

Material & Methods: 105 men between the age 50 and 80 with BPH and overactive bladder had been analyzed. The patients were divided in two groups: 1st group- 52 patients received mono therapy; 2nd group- 53 patient received Serenoa repens extract and Trosipium chloride. The duration of the treatment was 3 months and afterward 1 month of follow-up. The effectiveness of the treatment was assessed not only by the patients judgment, but also by the urodynamic findings and the measurement of residual urine volume.

Results: Patients receiving combined treatment reported considerable improvement after one month of receiving the drugs. Summarizing the data, the authors estimate

that this combination is effective in 68,18% of the treated patients at the end of the 3rd month and there is lack of effect in 31,82%.

Conclusions: The authors conclude, that this combined therapy can with success be applied at the mere beginning lower urinary tract symptoms.

S164 TRANSURETHRAL LASER VAPORIZATION OF THE PROSTATE-FIRST EXPERIENCE

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Introduction & Objectives: The LIFE(Laser Induced Flow Enhancement) laser is an alternative to TURP.The LIFE system is guided by a side-firing optic fiber,vaporizing prostate tissue very precisely and selectively while preserving the surrounding structures.LIFE laser system offers critical advantage: vaporisation and coagulation are both possible.The LIFE procedure uses Selective Light Vaporisation (Diode Laser ,wavelength980 nm,output power 150Watt) to eliminate unwanted soft tissue using the EVOLVE Laser System and Twister fiber.

Material & Methods: In the period of 4 months (01.02.-01.06.2010)we treated 15 patients, age between 55-89, with BPH. IPSS was 25-35.QL 4-5,Uroflow 8-12 ml/sec RU 80-120ml.Five patients had complet urinary retention with cateter. Volumen of the prostate was 30-70 ml.Operation has lasted 20-50 minute.All the patients received short term intravenous anesthesia.No hospitalization post-op was required.

Results: All patients had cateters up to 48 hours.There were follow ups after one,two,three months.After three monts:IPSS 15-18,QL 2-3,Uroflow 16-18 ml/sec,RU 10-20 ml.Minimal post-treatment discomfort or side effects.All patients had quick recovery.The levels of sodium and hemoglobin were stable, no cardiovascular complications.

Conclusions: LIFE laser is an effective, gentle and minimally invasive procedure. It is outpatients procedure,with no blood transfusion necessary, limited time for post-op cateterisation and option of short intravenous or local anesthesia. Compared to traditional surgery,SLV is a low-trauma,low-pain and comfortable alternative.

S165 OUR EXPERIENCE WITH THE TREATMENT OF BENIGN PROSTATIC HYPERPLASIA (BPH) WITH TAMSULOSIN IN PATIENTS WITH NORMOTENSION OR ORTHOSTATIC HYPOTENSION

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Introduction & Objectives: The purpose of the study was to evaluate the efficacy and safety of Tamsulosin 0.4 mg once daily after mail compared with placebo in patients with benign prostatic enlargement, lower urinary tract symptoms and prostatic obstruction tract.

Material & Methods: The study include 156 male patients suffering from lower urinary tract symptoms (LUTS) between January 2006 and December 2007 in Department of Urology in University Clinic of Skopje. The mean age in years was 62 + 2.4(58-76). The anamnesitic data were evaluated with international prostatic symptom score (IPSS) questionnaire and data's for blood pressure. The patients were examined physically with digitorectal examination, by laboratory methods as prostatic specific antigen (PSA), ultrasonography (USG), urinoculture and uroflowmetry. Patients with no sterile urinoculture, hydronephrosis, elevated levels of PSA above 4 ng/ml, with suspicious digit rectal examination, or rest urine above 150 ml were excluded from the study. Randomly were assigned in two groups: Study group which include 120 patients treated with tamsulosin and 36 patients in control group treated only with placebo. The impact of tamsulosine in flow of urine was evaluated with uroflowmetry while residual urine is measured with the ultrasonography, blood pressure with the manometer in the morning. First evaluation was after 35-40 days of continually treatment with tamsulosine, than at 6 and 12 month.

Results: 10-20 mmHg decrease of the systolic and diastolic blood pressure was registered at 8 patients of study group and 2 in control group. Q max was approximately 30% elevated in study group ($p<0.05$). Average flow rate (AFR) was elevated for 20%, respectively the time of miction was shorter for 25% ($p<0.05$).

Conclusions: Tamsulosin 0.4 mg once daily is safe, well-tolerated and improves both the symptoms and urinary flow rate in patients with benign prostatic obstruction.

S166 INFLUENCE OF ROYAL JELLY AND A DECREASE OF PSA IN PATIENTS WITH BPH

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Introduction & Objectives: Aim of this study is to show the impact of royal jelly in the fall of PSA in patients who had elevated PSA values above 10ng/ml.

Material & Methods: The 57 examined patients with BPH who had higher values