patients with prostate cancer had the pathological stage T2, only 1 patient had the pathological stage pT3a. In one case there was a prostate cancer with cT3b after the treatment (RT and OE) and we have not found any malignant cell in prostate. Mean age of patients with prostate cancer was 67 years against mean age of whole patient file.
Conclusions: Our results promote the published studies that affection of the prostate by transitional cell cancer and prostate cancer is relatively often finding in preparations after cystoprostatectomy. Prostate spearing radical cystectomy should be preventing particular examination to minimalize risk of holding the tumor in patient.

C100
Lateral decubitus position is less painful than lithotomy position for patients undergoing prostate biopsy

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Introduction and Objectives: The purpose of our study was to determine if patient's position during prostate biopsy can influence their perception of pain during procedure.
Material and Methods: Between February and November 2008 we performed transrectal ultrasound (TRUS) guided biopsies on 139 men. They were divided in 3 groups: group 1 was in lateral decubitus position (n = 41), group 2 was in lithotomy position with the insertion of intrarectal 2% lidocain gel (n = 50) and group 3 was in lithotomy position without gel (n = 48). All patients underwent biopsy for the first time. None of them were using analgesics at the time of procedure. Rectal abnormalities were excluded before insertion of ultrasound probe. 12-core samples were taken each time. Immediately after the procedure patients were asked to grade the pain they felt during the procedure with 10-point visual analogue scale (VAS).
Results: Kruskal – Wallis non-parametric test was used to compare three groups of sampled data. In group 1 median pain score was 2.6; in group 2 it was 4.95 and in group 3 it was 4.6. There is a significant lower perception of pain in the group in lateral decubitus position during biopsy (p = 0,00002).
Conclusions: Our study showed that lateral decubitus position could be less painful for patients than lithotomy position. There was no significant difference in pain perception between groups in lithotomy position regardless of applied lidocain gel.

C101
Detection of ETS translocations using Affymetrix exon 1.0 ST arrays

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Introduction and Objectives: Gene rearrangements can be an initial event in oncogenesis. Whereas prostate cancer (PrCa) specific TMPRSS2–ERG fusions are frequent genomic alterations, fewer TMPRSS2 fusions with other ETS transcription factors have been described. Cancer Outlier Profile Analysis (COPA) led to the identification of gene fusions in PrCa. Our recent study aims to use COPA analysis on the new Affymetrix exon 1.0 arrays to assess the prevalence of outliers in PrCa patients. We validated the technology using the ERG exon specific gene expression data.
Material and Methods: Based on the pathology findings of 70 radical prostatectomy specimens four groups of patients were identified: 1) low grade (LG-PrCa; n = 20), 2) high grade (HG-PrCa; n = 22) 3) castration resistant (CR-PrCa; n = 21) and 4) metastatic (Met-PrCa; n = 7). Following RNA isolation gene profiling was performed using a microarray technique (GeneChip, Affymetrix). We did bioinformatic analysis, including COPA on the standard gene set (23,000 genes).
Results: 250 outliers genes were identified on a microarray analysis. ETS transcription factors family genes: ERG, ETV1, ETV4 and ETV5 were selected for further experiments. ERG, ETV1, ETV4 and ETV5 were overexpressed in 39 (55%), 4 (5.7%), 2 (2.8%) and 2 (2.8%) of tumors, respectively. Further, in all tumors overexpressing ERG, TMPRSS2–ERG fusions were identified using an independent test. The overexpression of ETV1 and ETV5 was only observed in all cases of aggressive PrCa.
Conclusions: We confirmed in this COPA analysis of expression data from 70 prostate cancers the frequent overexpression of ETS oncogenes. Except from the common TMPRSS2–ERG fusions, we haven't been able so far to identify new 5′ fusions partners. Additionally, we were able to show that ETV1 and ETV5 were overexpressed in patients with aggressive PrCa. Therefore, exon 1.0 ST arrays can be used to lead the way in the discovery of gene fusions.

Poster session 7: Laparoscopy and Reconstructive surgery
Saturday, 24 October 2009, 09:20–11:30
Poster room 1

C102
Complete laparoscopic nephroureterectomy

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Introduction and Objectives: Urologists are still looking for the best method of accomplishing a nephroureterectomy (NUE). While a laparoscopic nephrectomy (LNE) as a part of NUE is yet broadly accepted, removing the ureter is still problematic – the approach (endoscopic, open, and laparoscopic) and consequence of steps. We present results of a recently described complete laparoscopic NUE (CLNU) with thermosealing system (Tsivian et al: Eur Urol, 2007, 52; 1015–9).
Material and Methods: We start CLNUE in the flank position with standard LNE through 4 (left side) or 5 ports (right side). The ureter is liberated with harmonic scalpel or thermosealing system (Ligasure Advance®) to the urinary bladder. The gonadal vein must to be cut off. Ureter is excised with bladder cuff with thermosealing system (Ligasure Atlas®) introduced through another suprapubic port 10 mm. Specimen is removed in bag through muscle splitting incision of the lower abdomen. A permanent bladder catheter is removed on the 5th postoperative day. From 4/2008 to 6/2009, 19 patients underwent NUE. Three LNUE with an open ureterectomy for an advanced tumour of the distal ureter, one open NUE with a lymphadenectomy for an advanced tumour of pelvis. Fifteen underwent CLNU. They are evaluated in details.
Results: Eight men and seven women, the mean age 68±8 (57–80) years. Five times on the left side, 10× on the right side. Tumour was in the renal pelvis 8×, in ureter 4× (2× in the distal ureter). The mean time of operation was 126±21 (86–160) min. In three cases, CLNUE was preceded 3× with cystoscopy (1× with transurethral resection of urinary bladder tumour) and 3× with diagnostic ureteroscopy, the time of the endoscopies wasn't included to the time of CLNUE. In one woman, CLNUE was performed ipsilateral to a transplanted kidney to the iliac fossa. The mean blood loss was 62± 57 (0–200) ml. The mean weight of specimen was 478±211 (210–1067) g. The histology

was 12× urothelial cancer (1 pT3, 2 pT2, 5 pT1, 4 pTa), 1× clear renal cell carcinoma pT3aG2, 1× oncocytoma and 1× xantogranulomatous pyelonephritis. Complications were rare, only urinary tract infection with B. coli on 6th postoperative day. Fourteen patients were discharged from hospital on 7±2 (5–11) day, patient with transplanted kidney was transferred on 3rd postoperative day to department of nephrology. The mean follow-up is 8 (1–14) months; patient with transplanted kidney underwent TURT for recurrent non-muscle invasive bladder tumour.

Conclusions: CLNUE is mininvasive, fast and safe method without need to change patient's position. It is feasible even ipsilateral to a transplanted kidney. Open approach is reserved for advanced tumours only. We recommend starting NUE always with LNE. Liberation of ureter in pelvis is technically challenging, in case of any problems in pelvis, open ureterectomy can be performed. Long term oncological results are unknown. The work was supported by Czech government research project MSM 0021620819.

C103

Strictures of urethrovesical anastomosis after laparoscopic radical prostatectomy: Risk factors and treatment options

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Introduction and Objectives: Strictures on vesicourethral anastomosis(VUA) after laparoscopic radical prostatectomies(LRP) are relatively common complication. Beside prolonged extravasation on anastomosis, operations on prostate or bladder neck, which were done before radical prostatectomy, as risc factors for strictures on VUA, we think that meticulous preparation on bladder neck and apex of prostate as much as technique of anastomotic sutturing, are major factors for prevention of strictures on anastomosis.

Material and Methods: 733 patients with prostate carcinoma were operated between Years 2004 and 2009. Follow up was at 1, 3, 6, 12, 18 and 24 month. Strictures were diagnosed urethrocystoscopically. When the stricture was diagnosed, it was resolved with incision, transurethral resection (TUR) or with open reconstructions of anastomosis. Method selection depended of length and degree of stricture.

Results: After median time of 5.8 months, we diagnosed stricture on VUA in 18 patients (2.2%). We founded that prolonged extravasation and operative technique of preparation of bladder neck, apex and construction of VUA, are major factors for prevention of stricture. Incision on anastomosis was performed in 15 patient, in 2 patients we did TUR and in one patient we had to do done open reconstruction.

Conclusions: Preparation of bladder neck and apex, as much as construction of anastomosis are very important risc factors for preventions of stricture on VUA. Good operative technique and maintaining maximal concentration during the whole procedure is crucial.

C104

Laparoscopic nephrectomy for advanced renal tumours (cT2 >8 cm, cT3a–b, cN+)

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Introduction and Objectives: Laparoscopic radical nephrectomy (LRN) is considered a standard of care in the treatment of T1–2 (≤ 8 cm) renal tumours. The objective of this paper is to summarize our results and our own experience in the treatment of advanced renal tumours (cT2 >8 cm, cT3a–b, cN+).

Material and Methods: From January 2003 to June 2009, we have accomplished 281 LRN at our institution. Transperitoneal approach was prefered in 259 (92%) patients. We preoperatively indicated CT or MR angiography of kidneys. Tumor thrombus was present in renal vein not extending into IVC. In our cohort, we identified patients with cT1–2 (≤8 cm) tumours – group 1 – and statistically compared their perioperative data with clinically advanced renal tumours (14× cT2 > 8 cm, 51× cT3a, 5× cT3b, 1× cT3acN2) – group 2.

Results: There were 195 (73.7%) patients in group 1 and 70 (26.3%) patients in group 2. We found statistically significant differences (p-value <0.05) between these two groups in terms of tumour size (51.6±13.0 mm in group 1 vs. 70.0±19.4 mm in group 2) and weight of specimen (550.8±199.1 g in group 1 vs. 691.6±233.4 g in group 2). Remaining perioperative data (group 1 vs. group 2) were statistically comparable (mean age was 61.9±11.7 yrs vs. 63.5±10.0 yrs, operating time was 128.9±45.9 min vs. 118.8±31.1 min, blood loss was 82.8±128.0 ml vs. 108.9±141.5 ml, hospitalization time was 6.4±2.2 vs. 5.3±1.3 days, complication rate was 6.2% vs. 8.6% and conversion rate was 5.8% vs. 5.4%). Mean follow-up was 34.2±20.1 months in group 1 vs. 25.8±17.8 months in group 2.

Conclusions: Minimally invasive surgery in the treatment of advanced renal tumours (cT2 > 8 cm, cT3a–b, cN+) is feasible in selected patients and demands experienced laparoscopic surgeon. Surgical outcomes are then comparable with T1–2 (≤8 cm) group. These procedures should be centralized and performed in high volume centres.

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C105

Extraperitoneal laparoscopic radical prostatectomy: Evaluation of learning curve

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Introduction and Objectives: Exstraperitoneal laparoscopic radical prostatectomy (ELRP) is a technically exacting operative procedure. We demonstrate our center's learning curve.

Material and Methods: Between April 2005 and May 2009, 554 consecutive men with a mean age of 64.1 (range 47–72), a mean pre-operative PSA of 5.9 ng/ml and clinically localized prostate cancer underwent ELRP by six urologists at General Hospital Slovenj Gradec. Urologist I and II are senior surgeons that have extensive experience from transperitoneal laparoscopic radical prostatectomy and other laparoscopic procedures, urologist III has medium laparoscopic experience and other three urologists (IV–VI) have a little experience in laparoscopy. Operative time, estimated blood-loss and positive surgical margin rate were noted. All urologists assisted more than 100 transperitoneal laparoscopic radical prostatectomies before starting with ELRP. In order to our study the patients were divided into four subgroups consisting of the first 50 patients operated, the next 100, 150 and other 254 patients.

Results: In 5 patients the conversion was needed because of major bleeding. 11 complications required reoperation: 3 recto-vesical fistula, 1 rectal injury, 2 major bleeding and 5 anastomosis failure. There was no per-operative or post-operative mortality. Pathological stage was pT2 in 69.2% and pT3 in 30.8% tumors. Urologist I performed 178 operative procedures, urologist II 243, urologist III 54, urologist IV 42, urologist V 28 and urologist VI performed 9 procedures. Results of operative time, estimated blood-loss and positive surgical margin rate for all urologists are shown in the table.