

in different age groups for diagnosis of Prostate Carcinoma, focusing on the avoidance of unnecessary prostate biopsies.

Material and Methods: A total of 4955 men (a mean age of 63.3 ± 11.3) without a history of prostate surgery and disease were enrolled into the study. Serum tPSA, fPSA and f/t PSA ratios were determined for the study population and for different age categories. All males who had suspicious digital rectal examination and tPSA >4 ng/mL underwent transrectal ultrasonography-guided prostate biopsy. Receiver operating characteristic (ROC) curves for each group were generated by plotting the sensitivity vs. $1 - \text{specificity}$ for the f/t PSA ratio. The sensitivity and specificity were obtained using different f/t PSA ratio cutoffs for different age groups.

Results: Prostate cancer was detected in 109 patients (2.2%). There were 657 patients with a PSA level of 4–10 ng/ml. According to sensitivity and specificity f/t% PSA cutoff points were 13%, 18%, 14% and 13% in 50–59, 60–69, >70 and all ages categories in patients with initial PSA level of 4–10 ng/ml.

Conclusions: The current study showed that the use of f/t PSA ratio in patients with PSA levels of 4–10 ng/mL should enhance the specificity of PSA screening and decrease the number of unnecessary biopsies. f/t PSA levels may show dissimilarities according to age, so further studies are warranted to identify this relationship.

Poster Session 3: Bladder Cancer

Friday, 11 September 2009, 10:30–12:30

Poster room 3

N33

The rate of incidental prostate cancer in patients who underwent radical cystoprostatectomy and its clinical significance

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Introduction and Objectives: In this study, we aimed to determine the rate of incidental adenocarcinoma of prostate in patients undergoing radical cystoprostatectomy (RSP) and to assess its clinical importance in the light of literature.

Material and Methods: In our clinic from 1995 to 2008 the medical records of 135 (40–82 years) patients with invasive bladder cancer who underwent RSP, were reviewed retrospectively. None of these patients had had any evidence of prostatic adenocarcinoma before cystoprostatectomy. Pathologically, 4 cross sections were routinely taken from each prostate specimens, including one from the apical surgical border.

Results: A total of 10 (7.4%) coincidental adenocarcinoma of prostate were detected in 135 patients. Mean age of the patients with prostate carcinoma was 70.2 years (Range:63–80 years). All patients had had normal prostate specific antigen (PSA) levels (1.3–3.4 ng/ml) and normal digital rectal examination findings before surgery. Gleason scores were 4, 5 and 6 in 7, 2 and 1 patient, respectively. All patients with prostate carcinoma had negative surgical border on prostatic apex. All patients had PSA levels less than 0.1 ng/ml on the third month after RSP. Follow-ups of four patients ranged between 52–61 months and no PSA recurrences was recorded.

Conclusions: The coincidental presence of prostate cancer with bladder cancer should be kept in mind and therefore detailed pathological examinations should be carried out.

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The evaluation of recurrence rates within the first year for Ta T1 low and intermediate transitional cell carcinoma of the bladder to change the routine follow-up cystoscopies

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Introduction and Objectives: Frequency of cystoscopic follow-up of superficial bladder cancer is still causes confusion and has not been clearly defined. Cystoscopic follow-up is a considerable workload for the urologist and is also an invasive procedure for the patient with high costs. In the study, we reviewed our experience to determine any possible criteria which can lead to reduce the frequency of follow-up cystoscopy, retrospectively.

Material and Methods: Between 1998–2008, 641 patients with primary stage Ta and T1 bladder cancers that were treated in our department were evaluated retrospectively. The pattern of recurrence and the recurrence rates in the first year were assessed.

Results: The recurrence rate was 21% at 3 months. The recurrence rates at 6 and 9 months were 9.2 and 11.9% respectively. The recurrence rate at 12 months was 8.3%. For tumors with no recurrence at 3 months, the recurrence rates at 6, 9 and 12 months were 8.6, 11.4 and 7.19% respectively. With respect to stages, there was a statistically significant difference in recurrence rate stages pTa and pT1 in the first and in the third control ($p=0.001$, $p=0.003$) respectively. According to the recurrence rate within the first year, the difference between G1 and G2 tumors was not statistically significant regardless of the stage ($p > 0.05$).

Conclusions: Patients with initial stage Ta or T1 grade 1 and 2 bladder cancers and negative first cystoscopy have a significantly lower recurrence rate than those with recurrence at first cystoscopy. In patients with initial low grade carcinoma, it seems logical to change the routine follow-up cystoscopy protocol. If the thirdmonth cystoscopy is tumor-free, it is appropriate to perform the next follow-up cystoscopy 1 year after the initial resection.

N35

Pathophysiological and clinical problems after urinary diversion

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Introduction and Objectives: During the period bowels had been used for urinary diversion (UD), many clinical and pathophysiological problems are seen.

Material and Methods: We want to focus on the most important problems, using the latest clinical data and own experience.

Results: Before Bricker in 1950 described his conduit, uretero-sigmoidostomy were the only UD used commonly. Malignancies are reported in large series and is about 3.5–19% [1]. In Denmark the few patients still alive is recommended to sigmoidoscopy when symptoms occur; in symptomless pt – bloodtest every year and sigmoidoscopy every 3rd year [2].

Metabolic acidosis has been reported in 100% of pt after ureterosigmoidostomy, bladder substitutions or continent reservoir [3]. Metabolic acidosis can be life-threatening, as we will show in our case later and prophylaxis with peroral bicarbonate is simple and cheap treatment.

The mucus production can be trouble as bad acute ureteric obstruction, can be important in reservoirs stones formation.

Asymptomatic bakteriuria in pt with reservoirs, rectal reservoirs and ileal conduits not require antibiotics, but symptomatic upper urinary tract infection shows problem with reflux or obstruction.

Urolithiasis formation is common in reservoirs due to artificial materials (e.g. staples), infections, abnormal composition of

urine, mucus production, urinary stasis, noncompliance with irrigation and catheterization regimens [4]. Osther et al. [5] investigated urine in pt with ileal-urethral Kock reservoirs, they have lower urinary excretion of citrate and higher ph, calcium oxalate, calcium phosphate, brushite and magnesium ammonium phosphate than in normal men.

Pts with UD after removing of terminal ileum and ileocaecal valve can have problems as: malabsorption of bile acids and fat, secretory-osmotic diarrhea, acceleration of bowel transit, hypovitaminosis, formation of gallstones and urinary tract stones.

Case: The 58 years old female with Coffey-bladder because of urethral atresia, was operated at 5 years old. She was hospitalized several times in the last 7 years in very bad condition due to metabolic acidosis and low bicarbonate (8 mmol/l). Pt is in prophylaxis treatment now, feels good, when she remember medication.

Conclusions: Conclusions: The problems can be minimized by pts better selection, life-long surveillance and early operation.

Reference(s)

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- [2] Eur.Urol.1986,360-1.
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N36

Laparoscopic nephroureterectomy combined with transurethral laser excision of a rosette in urinary bladder as a modern treatment method of upper urinary tract carcinomas (Preliminary report)

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Introduction and Objectives: The aim of the study was to introduce a new treatment method of upper urinary tract carcinomas (based on the Mc Donald's concept from 1952) using holmium laser for excision of a rosette in the bladder combined with laparoscopic nephrectomy and to evaluate the treatment effectiveness in the group of 9 patients.

Material and Methods: From January to June 2009, 9 patients with UUTT had nephroureterectomy by the combined method consisting of endoscopic excision by holmium laser of a rosette in the bladder and subsequent laparoscopic removal of a kidney and ureter without urinary bladder suturing. The patients were qualified for surgery on the basis of urography, abdominal cavity CT, ascending pyelography and ureterorenoscopy. Seven men and two women at the age from 62 to 80 years were operated in general anesthesia. The mean age was 70 years. All patients had intraparietal ureter part removed with Ho YAG laser. Energy dose was 10J and frequency 5Hz. All patients after endoscopy had a 24Ch catheter inserted into urinary bladder. 7 patients had laparoscopic nephroureterectomy, 2 patients because of cardiologic diseases were not qualified for laparoscopic procedure and they had nephroureterectomy by lumbar access. 7 patients were operated due to renal pelvis tumour, and 2 patients due to ureter tumour. Ureter tumours were located on the right side, 4 renal pelvis tumours were localized on the left side, and 3 on the right side. Control examinations in all the patients consisted of cystography on the 10th day after catheter removal, cystoscopy 3 months after the surgery, abdominal cavity USG 3 months after the surgery and abdominal cavity CT after 12 months. Taking samples of the bladder in the site of the scar of rosette laser removal was planned in all the patients.

Results: The mean time of endoscopic and laparoscopic procedure was 110 minutes; endoscopy 20 min and laparoscopy

90 min. All patients had urine derivation by 24Ch catheter and the urinary bladder was not sutured. Cystography made after catheter removal did not show any urine infiltrations. The patients average stay in hospital was 6 days. Three control cystoscopies did not detect macroscopic tumours in urinary bladder

Conclusions: Endoscopy laser method of treatment of upper urinary tract tumours is a simple, patient friendly method because of decreased traumatic effect, with reduced period of reconvalescence (operation and hospitalization) and providing negative oncological effects to the same extend as the classic method

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Macroscopic haematuria – a leading urological problem in patients on anticoagulant therapy. Is the common diagnostic standard still advisable?

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Introduction and Objectives: The use of anticoagulant drugs (AcD) is a popular and beneficial therapy for patients with numerous diseases. However, serious complications may occur, i.e. bleeding in the form of haematuria (hmt). Hmt, as a symptom of serious urinary tracts diseases, should be an urgent diagnostic matter for a clinician. Iatrogenic hmt may be the reason for urological consultation and hospitalization, during which expensive diagnostic procedures are performed. The aim was to assess the phenomenon of iatrogenic hmt in a current clinical practice and analyze its origins in patients receiving AcD. The economic aspects of diagnosing hmt were of special interest.

Material and Methods: Retrospective analysis of clinical documentation of 238 patients aged 18-99 years (mean 57 years) was performed. All patients were consulted for hmt in 2007-09 by 5 consultants-urologist in the following departments: nephrology (43), cardiology (27), general (23) and vascular surgery (11), cardiosurgery (40), hematology (34), gynecology (11) and internal diseases (49). In the group of 238 patients with hmt, there were 155 (65%) men, who received AcD – group A: oral anticoagulants (36%), non- or fractionized heparins (27%) and antiplatelet drugs: acetylsalicylic acid (21%), clopidogrel (11%), ticlopidine (5%). Another 83 patients, who presented with hmt – group B, did not receive any AcD. Hmt was found mainly in patients >65 years (67%), with concomitant diseases (71%): HT, CHD, arrhythmia, end-stage renal disease. The majority of patients had the full diagnostic panel performed (n=216, 91%) including: USG of urinary tracts, urography or contrast-CT and cystoscopy. The diagnostic results were analyzed with the special attention to the negative ones, in which no pathologies in urinary tracts were found (n=193, 81%).

Results: Pathologies of urinary tract were found in 45 (19%) patients: neoplasms – bladder cancer (8), prostate cancer (6), renal cancer (4), urothelial cancer of upper urinary tract (3); inflammatory conditions (5); benign prostate hyperplasia (12); urolithiasis (7). The number of pathologies detected in the group A compared with group B was 8% and 16%, respectively (p=0.2). Estimated cost of diagnostic procedures for hmt per patient was 333 EUR, assuming average time of diagnostics as a 3-day hospitalization. The cost-effectiveness analysis revealed that the cost of a single neoplasm detection reaches the unacceptable value of 3777 EUR.

Conclusions: In our study, the significant correlation between the presence of hmt and anticoagulant therapy was observed. Urological origins of hmt are more often present in patients not receiving AcD. Standard diagnostic procedure, as a expensive