regarding treatment. Operative realignment of the disrupted urethra over the Foley catheter is an old method giving the best results with regard to the serious squeals of the injury, such as incontinence, impotence and stricture of the urethra. However, it is usually performed after initial operative procedure of stabilization of fractured pelvis.
Material and Methods: We performed a retrospective analysis of 17 polytraumatized patients with type C pelvic fractures and complete disruption of the posterior urethra treated by traction over the Foley catheter in one single surgical procedure in teamwork of traumatologist and urologist.
Results: Nine patients didn't have any complications one year after the procedure. In eight cases we found short partial stenoses of the posterior urethra, which were successfully resolved by intraureteral dilatation with bougienage intrauretral resection or in one case by transperitoneal resection. There was no impotence and no incontinence found.
Conclusions: The method used was successful and offered good results with few complications and avoiding additional interventions.

Poster session 8: Bladder cancer, Urinary diversion and Pediatric urology
Saturday, 24 October 2009, 09:20–11:30
Poster room 2

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Prognostic value of gene PAX5 expression in the Ta,T1 urothelial urinary bladder carcinoma

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Introduction and Objectives: The aim of the study was to assess PAX-5 gene expression level in Ta,T1 urothelial urinary bladder carcinoma and to find out its prognostic value.
Material and Methods: 147 patients with Ta,T1 urothelial urinary bladder carcinoma have been enrolled into the study so far. The PAX-5 expression was evaluated quantitatively by real-time PCR metod using ABI PRISM 7000. As a reference gene the GAPDH gene was used, mRNA and cDNA were isolated by OLIGOTEX Metod using kits (Qiagen) and High Capacity cDNA Archive kit (Applied Biosystéme). All the patients were followed afterwards and treated following common schemes, the follow up time was 23.88±10.36 months.
Results: Tumor recurrence was detected in 78 (53 %) patients. In a group of 82 patients with PAX5 positivity higher than 0, (PAX5 > 0, PAX5 positive group) the tumor recurrence was detected in 78 (53 %) patients. In the other group of 65 patients with zero PAX5 expression (PAX5 = 0, PAX5 negative group) the tumor recurrence was detected in only 28 patients (43.1 %). The patients with the PAX5 expression higher than 0 were of 1.7 higher tumor recurrence risk than the patients with the zero PAX5 expression. The invasive form of the tumor was detected in 12 patients (8.2 %). In the group of 147 patients, the number of tumor progression was very low, so it was not possible to define the PFI. Following the multivariant Cox model of proportional risks, the variables were PAX5 expression, clinical tumor stage, tumor grade, multiplicity and tumor size. The PAX5 expression and tumor multiplicity were only independent tumor recurrence predictors. It was not possible to predict the tumor progression risk because of a low number of progression cases.
Conclusions: In a big group of patients we have confirmed the prognostic significance of PAX5 gene expression when predicting the Ta,T1 urinary bladder carcinoma recurrence risk. This prediction was independent of clinical prognostic factors used in every day.
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Nuclear matrix protein 22 urinary marker in diagnosing and follow up of urinary bladder tumors

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Introduction and Objectives: Cystoscopy in complement with urinary cytology represents the gold standard for diagnosing and follow up of patients with urinary bladder tumors. Despite the fact that numerous tumor markers have been developed in the past decade, they are still neither routinely used in the clinical practice nor recommended by the EAU guidelines. In our study we have focused on performance of nuclear matrix protein 22 (NMP22) tumor marker test and BladderChek® in-office test for detection of bladder tumors.
Material and Methods: NMP22 was measured with an ELISA assay (Matritech, Inc, USA). This test is an enzyme immunoassay where antibodies contained recognize the head domain of NuMA, nuclear mitotic protein. NuMA has been shown to be present in malignant tissues at levels more than 10 times higher than in normal tissue. The assay is designed to quantify NMP22 in stabilized voided urine. BladderChek® (Matritech, Inc, USA) in-office test detects elevated NMP22 concentration in 4 drops of voided urine in a panel well incubated for 30 minutes.
Results: NMP22 in urine was measured quantitatively in 94 patients and BladderChek® test was done on 75 urine samples preoperatively or during follow up. Urinary cytology was available for 94 patients and histology report of transurethral resection of bladder lesion was obtained in 40 patients. For prediction of malignant histological result sensitivity and specificity were 18% and 100% respectively for BladderChek® test, 37% and 100% for voided urinary cytology and 44% and 88% for NMP22 at 7.5 kU/l cutoff value,. Area under the curve in the ROC graph for quantitative NMP22 test was 0.73.
Stratified for grade sensitivities of Bladderchek® test, voided urinary cytology and NMP22 quantitative test were 10%,10% and 36% for low grade and 40%, 55% and 42% for high grade tumors respectively. Neither BladderChek® test nor voided urinary cytology found any of papillary urothelial neoplasm of low malignant potential (PUNLMP) tumors, while NMP22 test detected half of them. Stratified for stage in superficial bladder tumors sensitivities of BladderChek® test, voided urinary cytology and NMP22 quantitative test were 9%,15% and 25% for Ta and 67%, 75% and 78% for T1 tumors respectively.
Conclusions: NMP22 test showed higher sensitivity and lower specificity than voided urinary cytology. Area under the ROC curve for NMP22 test indicates moderate performance of this test. The sensitivity of Bladderchek® test is low. At present time we would not recommend any of the three noninvasive tests, namely voided urinary cytology, NMP22 test or BladderChek® test as a replacement for cystoscopy during diagnosing or follow up of urinary bladder tumors.