Urinalyses in Diagnostics of Urogenital Tuberculosis

Introduction and Objectives: Abnormal urinalysis can be seen in up to 90% of urogenital tuberculosis (UGTB). The diagnosis of prostatitis depends on microscopic and culture evaluation of prostate-specific specimens by 4-glass Meares-Stamey test, but this test leads to misdiagnosis of UGTB.
Material and Methods: There were 177 patients enrolled in the study. Patients were randomized in 4 groups. The 1st group (33 men) was examined by classic 4-glass test Meares-Stamey. The 2nd group (87 men) was examined with 2-glass test. This group was divided in 2 subgroups: in 2-a (42 patients) urinalyses were performed before digital rectal examination (DRE); in 2-b (45 patients) DRE preceded urinalyses. The 3rd group (57 patients) was examined with our technique. The urine was examined for red blood cell and leucocytes in three consequent portions during urine voiding without interruption. DRE performed after urinalysis, expressed prostatic secretion (EPS) was investigated. Only if EPS was not obtained, post-massage urine was examined. Efficiency of tests was evaluated by comfortability for patients and for doctor and by percent of false-positive results (FPR).
Results: The most comfortable test was in 2-b subgroup, and 4-glass test was worst of all. Comfortability of examination in both 2nd and 3rd groups were similar and significantly ($p<0.01$) better, than Meares-Stamey test. Diagnostic value of all tests was different. The 4-glass test has shown 18.2% of FPR, in 2-a 16.7% were FPR, in 2-b – 40.0% and 3rd group (57 patients, who were examined with our technique), has shown most objective results, with none FPR. Among patients who were investigated with 3-glass urinalyses, 4 cases of UGTB were diagnosed.
Conclusions: Specificity and sensitivity of 3-glass test with followed DRE for diagnostic of chronic prostatitis is higher and doesn't allow the overlooking of UGTB.