

## Clinical and para-clinical findings vs. PSA-levels of lower urinary tract infections in patients with benign prostate disease

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**Introduction:** To present one of the complications that patient with prostate diseases suffer from and that is urinary tract infections.

**Materials & Methods:** Various para-clinical and microbiological tests were used, after performing all the clinical and physical examinations. In the end the findings were compared in a way more qualitatively than quantitatively.

**Results:** Of 991 men with at least 1 PSA measurement and digital rectal examination (DRE) in the same year, 476 (48.03%) had at least 1 positive result (PSA>4.0ng/mL); of these, 204 (42.85%) were diagnosed with BPH, 33 (6.93%) with prostate cancer and 47 (9.87%) with prostatitis, the rest received therapy for BPH without further examination. Of 237 cases with measured PSA, 112 (47.25%) had LUTS (Lower Urinary Tract Symptoms) i.e. prostatism symptoms including: pain during and after micturition, change of urine color, "not fully able to empty his bladder", which indicated a microscopic urinalysis. 97 patients had positive finding and were forward examine a sample for urine culture. The urine was sterile in 64

patients (65.98%), and 33 (34.02%) patients were positive on the urine sample. After approximately 2-3 weeks (10-17 days) of antibiotic treatment a second urine culture was done, and 29 patients were cured of the infection. 4 patients received one more round of antibiotics and after the third "control" UC, all 4 of them had no trace of bacteria, but 2 patients still had LUTS and had palliative therapy prescribed.

**Conclusion:** Obstruction of the bladder by itself its situation that contributes to retention of urine and leads to a cystitis. The longer the wait the worse the infection gets and it can spread to the prostate (prostatocystitis), which can be presented with discomfort, pain, and raised PSA levels and eventually if not treated on time leads to chronic prostate inflammation.