

A Significance of Histological Inflammation of the Prostate on Lower Urinary Tract Symptoms in Patients with Benign Prostatic Hyperplasia

Introduction and Objective: We tried to investigate for clinical correlation between inflammatory histological findings of the prostate and lower urinary tract symptoms in the patients with benign prostatic hyperplasia.

Materials and Methods: A total of 274 patients whose prostate-specific antigen (PSA) was higher than 4.0 ng/dl, underwent prostate biopsy. International prostate symptom score questionnaire, uroflowmetry, and transrectal ultrasonography were also performed. Patients were divided into 3 groups and granted points according to the extent of lymphocytic infiltration: 0 point for patients with normal findings; 1 point for patients with lower than 50% of lymphocytic infiltration; 2 points for patients with higher than 50% of lymphocytic infiltration or secretor destruction by neutrophil infiltration findings. We quantified the extent of inflammation by using total prostatitis pathology score and classified 0-5 points, 6-10 points, 11-15 points, higher than 16 points into grade 1-4, respectively.

Results: Of the 274 patients, 71 who diagnosed with prostate cancer from their biopsy were excluded. Of the remaining 203 patients, 106 (52.21%) were classified grade 1, 57 (28.08%) were grade 2, 31 (15.27%) were grade 3, and 9 (4.43%) were grade 4. There were 142 patients (69.96%) in the group with core 2, which means severe inflammation, and 61 patients (30.04%) in the group without core 2. In addition, prostate volume, storage symptoms score and total scores in IPSS and quality of life were significantly higher in the group with core 2.

Conclusion: In our study's results, lower urinary tract symptoms deteriorated as prostatic inflammation became severe.