

PROSTATE ACTIVITY IN MEN WITH PARKINSON'S DISEASE

Hypothesis / aims of study

As the population is aging, the burden of neurological disorders is increasing but access to care is limited. Especially, considerable number of patients with Parkinson's disease (PD) suffers from gait disturbance as well as lower urinary tract symptoms (LUTS).

We prospectively evaluated the prostate volume (PV) and serum prostate-specific antigen (PSA) level to assess prostate activity in men with PD.

Study design, materials and methods

60 PD patients and 60 age-matched non-PD patients were studied, respectively. All of the enrolled patients visited urologic department to evaluate prostate for the relevant LUTS. We measured the PV using a gray scale transrectal ultrasonography and checked PSA level in patients with PD as well as in those with LUTS but not PD as age-matched control group, and then compared the two groups' data.

Results

A total of 120 patients were enrolled. The mean ages of both groups were 71.37 ± 7.36 in PD and 70.85 ± 6.31 in non-PD, respectively ($p=0.651$). There were no significant statistical differences between two groups in terms of total PV (28.56 ± 14.59 in PD vs. 29.21 ± 10.41 in non-PD, $p=0.727$), transition zone PV (12.72 ± 8.76 vs. 12.73 ± 6.68 , $p=0.993$) and total serum PSA (1.88 ± 2.80 vs. 2.01 ± 2.02 , $p=0.759$).

Age at the time of the study enrollment was correlated with serum PSA level and PV parameters in both groups, but disease duration in PD group did not correlate with serum PSA level and PV parameters.

Interpretation of results

Concluding message

There are no differences in the PV parameters and serum PSA level in PD patients compared with those of non-PD, control group. Our data show that a neurologic lesion causing PD does not affect prostate activity. In conclusion, the authors suggest that the prostate evaluation in men with PD is necessary not only to manage the symptoms effectively but also for prostate cancer screening whether they have LUTS or not.

Disclosures

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