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THE EFFECTS OF PELVIC FLOOR MUSCULAR EXERCISE ON THE LOWER URINARY TRACT SYMPTOMS OF THE ELDERLY PATIENTS AFTER BENIGN PROSTATE HYPERPLASIA SURGERY.

Hypothesis / aims of study

Although numerous enhanced surgical treatment methods regarding benign prostatic hyperplasia (BPH) have been proposed over the years, transurethral resection of prostate (TURP) is the standard treatment method and the fastest surgery with minimum invasiveness. Within 5 to 6 months following TURP surgery, patients can suffer complications, including urinary tract infection, orchitis, inactive bladder, ejaculation dysfunction, stroke , myocardial infarction, deep vein thrombosis, disseminated coagulation, impotence, and incontinence.The effectiveness of pelvic floor muscle exercise for the lower urinary tract symptoms (LUTS) of elderly with BPH after TURP surgery is unknown. The purpose of this study was to evaluate the effects of pelvic floor muscular exercise on LUTS of elderly with BPH after TURP.

Study design, materials and methods

This was a quasi-experimental cross-sectional study. The inclusion criteria were 1) age 60 and over, 2) were diagnosed with BPH by physicians, 3) had been prepared for TURP, thulium laser treatment, and photo selective vaporization (PVP) surgeries. Total 61 patients completed the study, 32 in the experimental group who received pelvic floor muscular exercise and 29 in the control group who remain the regular care. No statistically significant differences between two groups were observed among demographic data. Data collection included demographics, International Prostate Symptom Scores (IPSS), maximal urinary flow rate (Qmax) and post-void residual urine (PVR).

Results

The IPSS scores of experimental group is significantly lower than control group at all times (β=-4.490, $p<0.001$) (table 1). Both obstructive scores (β =0.231, $p<0.001$) and irritative scores (β=0.086, $p<0.001$) are lower in the experimental group (table 2). All of the 5 components of IPSS showed the same trend (table 3). Improvement of Qmax($z=1.936$, $p=0.03$) and average urinary flow($z=2.183$, $p=0.017$) are both significantly higher in the experimental group(table 4); However, the PVR and voiding volume are similar in the two groups.

Interpretation of results

The results of this study proved that performing pelvic floor muscle exercises can effectively reduce the score of the IPSS, increase the urinary flow rate, and decrease LUTS.

Concluding message

In conclusion, pelvic floor muscular exercise can improve LUTS in patients receiving TURP.

References

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Disclosures

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