105. EFFECT OF PELVIC FLOOR RELAXING VOIDING POSITION ON UROFLOWMETRY (UFM) IN MEN WITH LUTS DUE TO BPH

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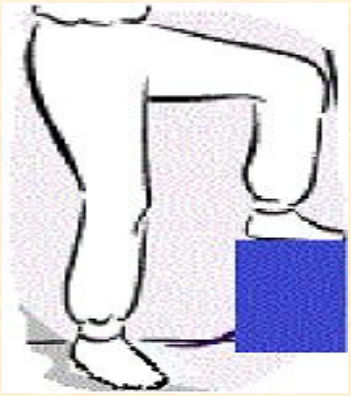

UFM Parameters	Standing Position (n = 71)	Relaxing Position (n = 71)	P-value
Qmax (ml/sec) : median (min, max)	15 (6.1, 44.2)	16.4 (5.3, 45.9)	**0.041**
PVR (ml): mean ± SD	50.34 ± 68.56	64.26 ± 70.54	**0.002**
Qave (ml/sec) : median (min, max)	8.4 (4, 19)	8.3 (4.5, 20.9)	0.228
Voiding time (sec) : median (min, max)	40.85 (14, 307.8)	43.3 (6.8, 387)	0.091
Flow time (sec) : median (min, max)	35.1 (12.4, 123)	34.5 (8.3, 109)	0.282
Time to max flow(sec) : median (min, max)	8.9 (1.3, 198.2)	8.55 (1.3, 232.3)	0.114
Void volume (ml) : median (min, max)	277.5 (150.8, 744)	291.2 (156.4, 866.2)	0.120

Table 1: UFM Parameters of BPH Patients with Normal and Relaxing Voiding Position

Hypothesis / aims of study

- To investigate the effect of pelvic floor relaxing position on voiding using UFM parameters in patients with lower urinary tract symptoms (LUTS) due to benign prostatic hyperplasia (BPH).

Materials and Methods

- We conducted a cross-sectional study from May 2017 to Nov 2017 and included men with lower urinary tract symptoms (LUTS) due to benign prostatic hyperplasia (BPH).
- A total of 71 patients were enrolled in the study.
- The UFM were performed in both standing and pelvic floor relaxing voiding position (unilateral abduct hip and flex knee: as figure) for each patient.
- The post-void residual urine (PVR) was measured using a portable ultrasound bladder scanner after each voiding.
- The maximum flow rate (Qmax), average flow rate (Qave), voided volume (VV) and PVR values were compared between the two different voiding positions.
- Statistical analyses were done using Stata 14.1®. Paired t-test and Paired sign test were done for parametric and nonparametric comparisons, respectively; $P < 0.05$ was considered significant.

Results

- A total of 71 men with a median age of 69 (43, 85) years were evaluated.
- The median void volume for the standing and pelvic floor relaxing positions in the patient group were 277.5 (150.8, 744) and 291.2(156.4, 866.2)ml, respectively with no statistically significant difference between groups.
- The median Qmax values for the standing and pelvic floor relaxing position in the patient group were 15(6.1, 44.2) and 16.4 (5.3, 45.9)ml/s, respectively.
- The mean PVR values were 50.30 ± 68.07 and 63.56 ± 72.28 ml, respectively.
- Comparison of UFM results in both positions showed statistical differences for higher Qmax and larger residual urine volume in the pelvic floor relaxing position relative to the standing position.

Concluding message

The UFM parameters seem to be affected by the voiding position in men with LUTS due to BPH. **Therefore, pelvic floor relaxing voiding position may be applied in BPH patients. Furthermore, physician may advise patient with LUTS due to BPH practice pelvic floor relaxing exercise to improve the symptoms.** More research is needed to further study in the patient with pelvic floor dysfunction.

References

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