

CLINICAL IMPLICATIONS OF PARADOXICAL FEELING OF INCOMPLETE EMPTYING IN MEN WITH LOWER URINARY TRACT SYMPTOMS

Hypothesis / aims of study

It remains unclear why patients suffer from a feeling of incomplete emptying despite no or little residual. We termed this clinical symptom as paradoxical feeling of incomplete emptying (PIE) and evaluated its clinical implications in men with lower urinary tract symptoms (LUTS).

Study design, materials and methods

Records were obtained from a prospectively maintained database for 905 first-visit men with LUTS. Patients with comorbidities that may affect voiding function and with post-void residual > 20mL were excluded. Finally, 421 patients were eligible for the study.

Results

By the International Prostate Symptom Score (IPSS), the score for feeling of incomplete emptying, 106 patients (24.6%) were characterized as mild (score 0, 1), 211 (49.0%) as moderate (score 2, 3), and 114 (26.4%) as severe (score 4, 5). PIE severity was significantly associated with total IPSS and with subscores for both voiding and storage symptoms ($P < 0.001$). Patients with severe PIE (paradoxical group, $N=114$) were compared with a propensity score-matched control group to adjust for age, post-void residual, and maximum flow rate (Q_{max}). Total IPSS was significantly different between the paradoxical and control groups (23.04 ± 5.68 versus 13.21 ± 5.48 , respectively; $P < 0.001$). The subscores for both voiding and storage symptoms were also significantly worse in the paradoxical group (both $P < 0.001$). The quality of life score was 4.51 ± 0.80 in the paradoxical group and 3.53 ± 1.05 in control group ($P < 0.001$).

Interpretation of results

PIE was frequently observed and, notably, PIE was significantly associated with both voiding and storage symptoms, even after adjusting for relevant variables. Future efforts should be directed at elucidating the mechanism of PIE.

Concluding message

In the present study, PIE was frequently seen in common medical urological practice. PIE was significantly associated with both voiding and storage symptoms, even after adjusting for relevant variables such as age, through a propensity score-matching study. In the near future, the mechanism of PIE should be elucidated for optimal management of LUTS.

References

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Disclosures

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