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ARE MALE AND FEMALE OAB DIFFERENT FROM A CLINICAL PERSPECTIVE? RESULTS FROM AN OBSERVATIONAL STUDY PERFORMED IN MADRID (SPAIN).

Hypothesis / aims of study

Overactive bladder (OAB) and storage lower urinary tract symptoms (LUTS) are defined as the presence of urinary urgency, usually accompanied by frequency and nocturia, with or without urinary incontinence, in absence of urinary tract infection or other urethra-vesical disorder. Male storage symptoms can be caused by bladder dysfunction (like detrusor overactivity or detrusor impaired contractility), benign prostatic obstruction (BPO), often caused by benign prostatic enlargement), or by a combination of bladder dysfunction and BPO (1). From the clinical perspective both male storage LUTS and female OAB are managed similarly as the diagnostic instruments are common and antimuscarinics and β3-agonist are regular therapies both in males and females (2). The study was aimed to determine whether differences between male and female OAB exist from the clinical perspective (demographics, score in self-administered questionnaires, patient reported outcomes (PROs) and bladder diaries). Secondary objective was identify differences in IPSS between males with the diagnosis of OAB and those without.

Study design, materials and methods

Observational non-interventional cross-sectional study on clinically investigated subjects over 30 years of age, some with suspected OAB and a similarly balanced control population. Diagnosis was made after detailed clinical history, physical examination including genital exploration in females and rectal exam in males, urinalysis, bladder and renal sonogram including post-void residual volume and 3-days bladder diary. Urodynamic study was not routinely performed. Differential diagnosis was stablished in all cases that did not fulfill criteria for a clinical diagnosis of OAB. Patients and controls completed a battery of self-assessed questionnaires validated is Spanish (B-SAQ, OAB-V8 and OAB-V3) and questionnaires evaluating QoL (PPBC, well-being, OAB-q and IPSS in males). Differences among groups were evaluated using Chi-2 test, t student and Cochran-Armitage trend test.

Results

411 subjects over 30 years of age, 177 (43.1%) males and 234 (56.9%) females, were investigated. Among them, 207 (50.4%) were diagnosed of OAB, 74 (35.7%) males and 133 (64.3%) females. Conversely 204 (49.6%) were controls, 103 (50.5%) males and 101 (49.5%) females, either without any specific diagnosis or with LUTS other than OAB. Comparing males and females with OAB several clinical differences were confirmed. Males were significantly older than females (63.6+10.9 vs 59.0+12.25; p=.01). Regarding associated coping strategies males more often specified that were obliged to search for toilets than females (98.5% vs 92.8%; p=.05). Concerning bladder diary, there was no difference between daily urinary frequency in males or females (10.4+2.2 vs 10.1+2.2; p=.24). Number of nocturnal micturitions per night was higher in males (1.6+1.0 vs 0.8+1.15; p<.0001) while number of grade >III urgency episodes per 3 day period (3.4+1.8 vs 4.1+2.0; p=.02) and number of grade IV (urge-incontinence) episodes per 3 day period (1.0+1.1 vs 1.8+1.5; p=.0003) were higher in females. Concerning self-administered questionnaires, no differences were detected regarding OAB-V3 score (6.05+2.9 vs 6.4+3.0; p=.44), OAB-V8 score (16.7+5.9 vs 15.9+6.5; p=.29), B-SAQ total score (11.05+5.1 vs 11.4+5.3; p=.79) or OABq total score (52.2+17.9 vs 55.4+22.9; p=.71). Also no differences were detected between OABq specific domains: coping (22+6.3 vs 22.5+7.6; p=.94), concern (13.2+5.9 vs 14.6+7.35; p=.28), sleep (8.5+3.7 vs 9.1+5.0; p=.9) and social (8.7+3.9 vs 9.5+5.0; p=.32). Males rated lower than females in Question 3 in OAB-V3 (dealing with bother derived from urge incontinence; p=.05), question 4 in OAB-V8 (bother derived from accidental urine loss; p=.005) and question 8 in OAB-V8 (bother derived from urine loss associated to urge; p=.007). Conversely, males rated higher than females in question 5 in OAB-V8 (bother derived from nicturia; p=.038) and question 6 in OAB-V8 (bother derived from nocturnal awakening; p=.025). Regarding patient reported outcomes (PROs) global well-being was superior in males than in females (46.5+27.7 vs 36.6+28.6; p=.01) (Figure 1) but no difference was detected in PPBC score distribution (p=.87). Comparing IPSS score in males with OAB and males without, significant differences were detected in storage IPSS (11.2+2.9 vs 5.7+3.0; p<.0001), voiding IPSS (9.9+3.8 vs 7.2+4.7; p<.0001), total IPSS (14.2+5.8 vs 5.9+7.0; p<.0001) and QoL (4.2+1.3 vs 2.3+1.5; p<.0001).

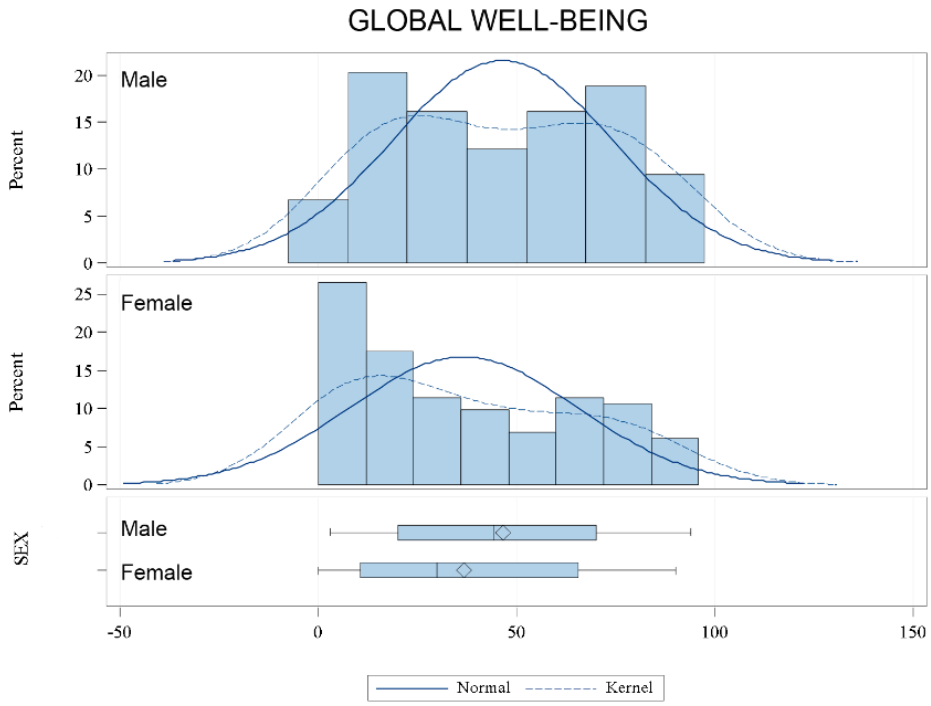

Figure 1. Self-perceived well-being on a 0-100 scale for patients with OAB according to sex.

Interpretation of results

Male OAB shares many circumstances with female OAB. However, several differences can be detected between genders, mainly based on micturition patterns. Nicturia is more common and more bothersome in males while urge-frequency and urge-incontinence are more severe and also more bothersome in females. Self-perception of well-being status is inferior in females. Patient age is higher in males than females. IPSS score is higher in male OAB patients than in males not affected by OAB, and this difference is not only in storage IPSS, but also voiding IPSS and QoL. Self-assessed questionnaires investigated (B-SAQ, OAB-V8 and OAB-V3) give no differential values in males or females. Also PROs defined by OABq domains offer no differential pattern between genders.

Concluding message

Male OAB presents certain differences from female counterpart, especially in patient age, bladder diary findings and self-perception of well-being. Storage IPSS pattern is not distinctive of male OAB. Neither PROs are differential, but certain questions give different values in consonance with the differences justified in micturition patterns identified in bladder diaries.

References

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Disclosures

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