

Angulo J C¹, Calderín M D P², Fernández Y³, González M⁴, Gómez E⁵, Herreros M B⁶, Zapatero M⁷, Dorado J F⁸, Peñasco P⁹

1. Universidad Europea de Madrid. Hospital Universitario de Getafe, Getafe (Madrid), Spain, 2. Centro de Salud Ciudades, Getafe (Madrid), Spain, 3. Centro de Salud El Greco, Getafe (Madrid), Spain, 4. Centro de Salud de Pinto, Pinto (Madrid), Spain, 5. Centro de Salud Getafe Norte, Getafe (Madrid), Spain, 6. Centro de Salud Parque Europa, Getafe (Madrid), Spain, 7. Centro de Salud Juan de la Cierva, Getafe (Madrid), Spain, 8. Pertica S.L., Madrid, Spain, 9. Centro de Salud Sector III

ASSESSMENT OF MALE AND FEMALE PREVALENCE OF OVERACTIVE BLADDER (OAB) IN MADRID (SPAIN) USING A SELF-ADMINISTERED SCREENING QUESTIONNAIRE: ABBREVIATED VERSION OVERACTIVE BLADDER AWARENESS TOOL OAB-V3.

Hypothesis / aims of study

Overactive bladder syndrome is a common condition affecting 12-17% of men and women in Europe (1), with prevalence increasing with age. Previous studies in Spain have reported an estimated prevalence of 11.8% (2) but few population-based prevalence surveys have been performed in Spain and none specifically in Madrid. Also the impact of OAB symptoms in aspects of occupational, psychological and social life are lacking in our environment. The abbreviated version Overactive Bladder Awareness Tool OAB-V3 has been validated in Spanish and confirmed a valid tool for the detection of patients with probable OAB in the general population in Spain (3). The primary objective of this study was to assess the prevalence of OAB symptoms in patients attending general practitioner office in a closed area in Madrid (Spain). Secondary objective was evaluation of the impact of OAB symptoms on well-being and labor productivity in this population.

Study design, materials and methods

Cross-sectional observational study carried out at all the primary health centers in a metropolitan town in SW Madrid (Spain) and their referral urology unit in a university hospital. Consecutive male and female subjects (aged over 30 years) aiming to evaluate at least 0.5% of the population of the town were screened were evaluated with self-administered questionnaire OAB-V3 (three questions on symptoms bother related to frequency, urgency and urge-incontinence; each rated 1-5). Age and gender were recorded. Subjects were classified into less than 3 rate (healthy controls) or equal or more than 3 (suspected OAB). All subjects with suspected OAB and a similarly balanced population of controls were clinically investigated. Presence or absence of coping strategies and also bothering defining OAB were investigated. Subjects with OAB-V3 >3, coping strategies and bothering were considered probable OAB (Coyne criteria). Detailed clinical history, physical examination including genital exploration in females and rectal exam in males, urinalysis, bladder and renal sonogram, general well-being scale, PPBC, 33-item OAB-Q and WPAI-SHP were performed to define the correct clinical diagnosis of OAB or other differential diagnosis and also the impact of OAB on well-being, individual domains and labor productivity. Kappa coefficient between OAB-V3 scale and clinical diagnosis was investigated, and ROC curve analysis was performed.

Results

OAB-V3 and demographic data from 923 subjects (0.55% of adult total inhabitants) over 30 years of age was obtained. Mean OAB-V3 value increased with age ($p=.0037$) and was superior in females than males ($p=.03$). Subjects with OAB-V3 >3 were 253 (27.4%), 92 (36.4%) males and 161 (63.6%) females. Their proportion in each decade was 11.1% (31-40), 24.6% (41-50), 26.9% (51-60), 28.6% (61-70), 32.8% (71-80) and 50% (81-90). Subjects with OAB-V3 >3, bothering symptoms and coping strategies were 209 (22.6%), 73 (34.9%) males and 136 (65.1%) females. Their proportion in each decade was 11.1% (31-40), 17.9% (41-50), 21.4% (51-60), 25.3% (61-70), 29.8% (71-80) and 44.4% (81-90) ($p=.0001$) (Figure 1). Patients classified by OAB-V3>3 had worse well-being (43% vs 87.6%; $p<.0001$), higher PPBC score ($p<.0001$) and worse parameters on OAB-Q transformed scores for each subscale (Symptom bother, 38.2 vs 6.4, $p<.0001$; Coping behaviors, 33.4 vs 2.15, $p<.0001$; Concern, 19.5 vs 1.5; $p<.0001$; Social interaction, 16.1 vs 1.2, $p<.0001$; Sleep, 15.4 vs 1.0, $p<.0001$; HRQL total score 18.5 vs 1.2, $p<.0001$). Labor productivity was not affected ($p=.14$) but the capacity to perform regular activities was in subjects with OAB-V3>3 ($p<.0001$).

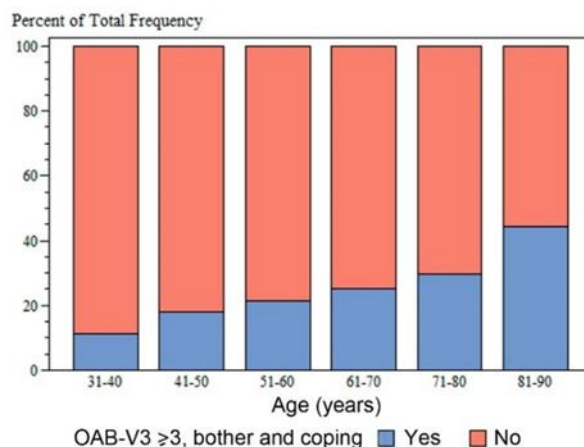


Figure1. OAB-V3 results corrected by Coyne criteria (probable OAB) according to age

Of all subjects included 411 (252 with OAB-V3>3 (suspected OAB) and 159 with OAB-V3<3) were clinically investigated in depth. Definite clinical diagnosis of OAB was established in 207 patients (50.4%). Kappa coefficient between definite diagnosis and OAB-V3 questionnaire was 0.73. Of suspected OAB subjects 202 (80.2%) were true positive and 50 (19.8%) false positive. Of 159 healthy controls 154 (96.9%) were true negative and 5 (3.1%) false negative. ROC curve for OAB diagnosis based on OAB-V3 questionnaire is shown, area under the curve 0.87% (Figure 2).

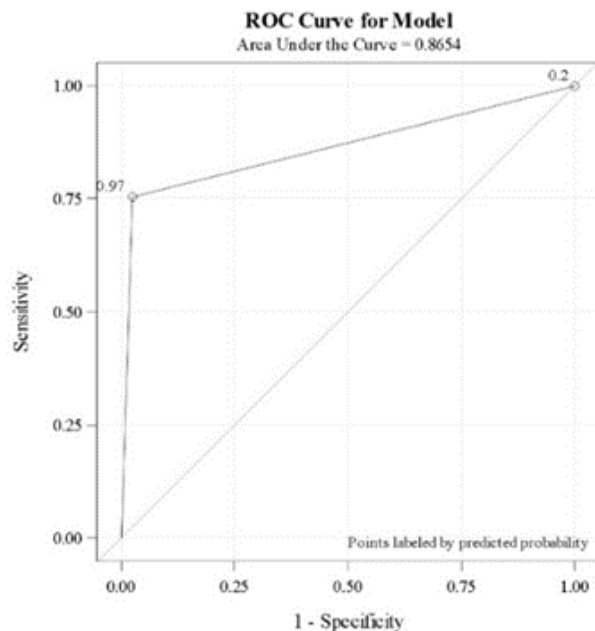


Figure2. ROC curve for diagnostic accuracy based on OAB-V3 self-administered questionnaire

Interpretation of results

The study confirms the clinical utility of abbreviated version Overactive Bladder Awareness Tool OAB-V3 to screen patients with OAB within a closed population with 87% accuracy. The prevalence of OAB in Madrid (Spain) is higher than previously considered (22.4%), and slightly lower in male adults >30 years (19.2%) than in female adults of the same age (24.7%). The impact of OAB symptoms quantified by OAB-V3 questionnaire on well-being and PROs in this population is also confirmed, but not on labor productivity.

Concluding message

OAB-V3 is a simple questionnaire that can be used for screening of OAB in a population with good predictive accuracy. Also this simplified self-administered questionnaire has important implications on HRQL issues and related domains.

References

1. Irwin DE et al. Eur Urol. 2006;50:1306-14.
2. Lugo Salcedo F, Sánchez Borrego R. Int Urogynecol J. 2013; 24:1559-66.
3. Brenes F et al. Med Clin (Barc). 2014;143:521-9.

Disclosures

Funding: The study was funded by Pfizer, Inc. **Clinical Trial:** No **Subjects:** HUMAN **Ethics Committee:** Comité Ético para la Investigación Clínica del Hospital Universitario de Getafe **Helsinki:** Yes **Informed Consent:** Yes