The Relationship between Psychiatric Disorders and Overactive Bladder in Women

Nicole Negbenebor BS1, Jonathan Shaw MD1, 2, Christine Raker, ScD1, 2 and Vivian Sung MD1, 2

Warren Alpert Medical School of Brown University, Providence, RI; Division of Urogynecology, Women & Infants Hospital, Brown University, Providence, RI

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Background

The neuropathophysiology of overactive bladder (OAB) and its relationship to psychiatric conditions is not well elucidated. OAB may be detected during urodynamic evaluation (UDE) as bladder muscle contractions, known as detrusor overactivity (DO). We hypothesized that women with psychiatric conditions will have more severe OAB symptoms and be more likely to demonstrate DO on UDE compared to women without psychiatric conditions. Our primary objective was to compare OAB symptom severity between women with and without psychiatric conditions who were undergoing UDE. Our secondary objective was to compare the presence of DO detected by UDE between women taking psychiatric medications and those who were not on these medications.

Methods

This is an ancillary study of a large randomized trial investigating the effect of adding an audiovisual intervention during UDE on DO detection compared to routine UDE. We enrolled 218 female patients with clinical OAB undergoing UDE. The primary outcome was OAB symptom severity as measured by 3 validated disease-specific questionnaires; the short form Urogenital Distress Inventory (UDI-6), urinary Pelvic Floor Impact Questionnaire (PFIQ) and Incontinence Severity Index (ISI). Secondary outcomes included number, amplitude, and length of detrusor contractions and urinary leakage associated with DO. We documented co-morbid psychiatric diseases and usage of psychiatric medications.

Results

Of the 218 patients, co-morbidity data was available for 203 patients and 140 (69%) of these reported a previous diagnosis of a psychiatric condition (depression 107 patients, anxiety 104, panic attacks 9, PTSD 5, ADHD 4, bipolar 3 and OCD 1). Some of the 140 patients had more than one previous diagnosis. There was no difference in symptom severity between patients with a previous psychiatric condition and those with no psychiatric history. However, among patients with a history of a psychiatric condition, higher UDI-6 scores (more severe OAB) were seen for those on anti-depressants ($p = 0.04$) and anxiolytics ($p = 0.005$) compared to no medications. ISI scores were also higher (more severe OAB) in patients on anti-psychotics ($p = 0.01$) and anxiolytics ($p = 0.001$) compared to patients on no psychiatric medications. Patients on antidepressants or anxiolytics had a significantly lower rate of DO per hour ($p = 0.03$ and $p = 0.01$ respectively) and a shorter duration of contractions ($p=0.02$ and $p=0.04$ respectively) compared to patients with psychiatric conditions on no psychiatric medications.

Conclusion

OAB symptoms are more severe among patients with a psychiatric history who are currently on anti-depressants and anxiolytics despite a decrease in the rate and duration of DO when using such medications.