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# NON-BLADDER COMORBID CONDITIONS IN FEMALE PATIENTS WITH IDIOPATHIC OVERACTIVE BLADDER

#### Hypothesis / aims of study

Growing evidences indicate that interstitial cystitis/bladder pain syndrome (IC/PBS) is closely associated with several non-bladder conditions, including irritable bowel syndrome (IBS), fibromyalgia (FM), chronic fatigue syndrome (CFS), headache and temporomandibular disorder (TMD). Overactive bladder (OAB) is another common clinical problem presenting with quite similar bladder storage symptoms as IC/PBS. However, whether non-bladder comorbid conditions are also associated with OAB is still unknown. This paper investigated the correlation between OAB and non-bladder comorbid conditions in female patients with idiopathic OAB.

## Study design, materials and methods

We collected 47 consecutive female patients with idiopathic OAB visiting our outpatient clinic. All patients had urinary frequency (more than 8 voidings per day) and urgency, with or without urgency incontinence. All patients did not have urinary tract infection, pain relating to bladder distension, stress urinary incontinence (SUI) or neurological disorder. All study participants completed the screening questionnaires for CFS, FM, IBS, TMD, multiple chemical sensitivities (MCS), headache and localized myofascial pain disorder (LMP). The severity of OAB was assessed with Overactive Bladder Symptom Score (OABSS). The correlation between the presence of non-bladder conditions and OABSS was analyzed with Mann- Whitney U test. Besides, the prevalence of the non-bladder conditions in OAB patients was compared with a group of 122 female patients with SUI. We used SUI patients, instead of healthy females, as the control group to avoid selection bias. The difference in the prevalence of non-bladder conditions between OAB and SUI was analyzed.

#### Results

The mean  $\pm$  SD age of OAB patients was 66.5  $\pm$  16.4 (range: 19-89) years. The prevalence of CFS, IBS, TMD, MCS, headache, LMP, and FM in OAB patients was 29.8%, 6.4%, 2.1%, 0%, 14.9%, 70.2%, and 19.1% respectively. 35 (74.4%) patients had at least one non-bladder condition. 12 (25.5%), 7 (14.9%) and 2 (4.3%) patients had two, three and four non-bladder conditions respectively. The mean  $\pm$  SD of OABSS was 10.1  $\pm$  2.7 (range: 4-15). There were no significant correlations between the OABSS and the presence of IBS (p=0.984), TMD (p=0.085), headache (p=0.159), and LMP (p=0.213). But, it is interesting to note that OABSS was positively correlated with the presence of CFS (p=0.006) and FM (p=0.030), and was associated with the number of non-bladder condition (p=0.045). The mean  $\pm$  SD age of SUI patients was 56.8  $\pm$  8.9 (range: 31-81) years. Compared with SUI patients, there was no significant difference in the prevalence of CFS (p=0.098), IBS (p=0.331), TMD (p=0.428), MCS (p=0.997), headache (p=0.896), and FM (p=0.573). But OAB patients were more likely than SUI patients to meet diagnostic criteria for LMP (p=0.010).

#### Interpretation of results

There was no significant difference in the prevalence of non-bladder conditions between female patients with idiopathic OAB and SUI except for LMP. In OAB patients, the presence of CFS and FM was positively correlated with symptoms severity of OAB. OAB patients with more non-bladder conditions tended to have more severe OAB symptoms.

#### Concluding message

Female patients with idiopathic OAB are likely to have multiple non-bladder conditions. Prevalence of LMP was particularly striking high in the OAB patients. The presence of CFS, FM, and multiple non-bladder conditions associated with a higher severity of OAB symptoms.

### **Disclosures**

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