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# SEXUAL DYSFUNCTION IS ASSOCIATED WITH CHRONIC PELVIC PAIN IN PATIENTS WITH INTERSTITIAL CYSTITIS / BLADDER PAIN SYNDROME (IC/BPS)

#### Hypothesis / aims of study

Previous study established a strong association between urinary tract symptoms and arousal disorders and sexual pain disorders in lower urinary tract dysfunction (LUTD). Other sources suggested that IC/BPS patients had significantly more dyspareunia and more fear of pain, compared with healthy controls. The aim of our study is to investigate the differences in the subjective symptoms, urodynamic parameters and anesthetic bladder capacity of IC/BPS in women with or without sexual pain.

# Study design, materials and methods

A total of 89 IC/BPS female patients compatible with the NIDDK criteria were included in this study. All subjects were asked if they had a history of sexual pain in recent two weeks and were assessed by validated questionnaire including O'Leary-Sant Symptom (ICSI) and Problem Index (ICPI). Pelvic Pain and Urgency/Frequency (PUF) questionnaire was also completed. Standardized consecutive filling cystometry and volume at first desire to void (FDV), normal desire to void (NDV), strong desire to void (SDV) and maximum cystometric capacity (MCC) were performed. Hydrodistension and cystoscopic anesthetic maximal bladder capacity (MBC) was also measured. We compared subjects with and without a history of sexual pain disorder using unpaired 2-tailed t tests.

#### Results

The occurrence of IC/BPS patients with sexual pain disorder was 65/89 (73%). (Figure 1) Patient demographics with or without sexual pain disorder showed the average age being 39.98 years (± 11.8) and 41.17 years (± 10.2), respectively. The ICSI and ICPI scores were equivalent between the two groups but patients with sexual pain had a statistically significant higher PUF scores than those without sexual pain (21.5±5.4 v 16.2±4.6, p< 0.01). In IC/BPS patients with sexual pain, the values for FDV, NDV, SDV, and MCC were lower than those without sexual pain but were not statistically significant (67.8±35.9 v 86.1±52.5, 93.3±38.2 v 115.1±56.4, 138.7±65.8 v 158.1±110.2, 195.4±69.9 v 225.7±149.8I). Similarly, patients with sexual pain had lower anesthetic MBC than those without sexual pain (596.1±210.1 v 646.2±156.7, p=0.2). (Table 1)

### Interpretation of results

The results of this study revealed that a large portion of IC/BPS patients have dyspareunia and combined with more severe chronic pelvic pain especially when patients with sexual pain. Although urodynamic parameters and anesthetic MBC were not significant, the trend that the patients with sexual pain have decrease of bladder capacity in urodynamic examination and MBC in hydrodistension was noted.

# Concluding message

Sexual pain in IC/BPS patients is indeed a bother symptom accompanied with chronic pelvic pain and decrease of bladder capacity in urodynamic examination and hydrodistension. PUF score was higher in patients with sexual pain disorder group because ICSI and ICPI did not particularly evaluate sexual pain score but PUF did. This suggests that physicians should consider sexual pain disorder in the management of patients with IC/PBS and use PUF score to evaluate not only irritative lower urinary tract symptoms (LUTS) but also sexual pain disorder.

Figure 1 Occurrence of sexual pain in IC/PBS



Table 1 Difference in IC/PBS with or without sexual pain

	Without sexual pain (n=24) Mean (±SD) Age: 41.17±10.2	With sexual pain (n=65) Mean (±SD) Age: 39.98±11.8
Voiding symptoms		
ICSI	11.36 (±2.8)	12.55 (±3.2)
ICPI	10.55 (±2.6)	11.22 (±3.3)
PUF	16.21 (±4.6) *	21.52 (±5.4) *
Urodynamic study		
FDV	86.13 (±52.52)	67.89 (±35.96)
NDV	115.13 (±56.41)	93.31 (±38.25)
SDV	158.19 (±110.28)	138.78 (±65.84)
MCC	225.75 (±149.86)	195.43 (±69.90)
Cystoscopic anesthetic maximal bladder capacity (MBC)	646.25 (±152.77)	596.15 (±210.11)

<sup>\*</sup>p<0.05

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