

## DOES MENOPAUSAL STATUS HAVE AN IMPACT ON PELVIC SYMPTOMS?

### Hypothesis / aims of study

To assess the impact of menopausal status, on a range of pelvic symptoms related to the lower urinary tract symptoms, pain and sexual dysfunction.

### Study design, materials and methods

A single questionnaire, composed of section 1 of the international pelvic pain society pelvic pain assessment form (IPPS)<sup>1</sup>, the interstitial cystitis symptom index and problem index (ICSUPI)<sup>2</sup>, the pelvic pain and urgency frequency symptom scale (PUF)<sup>3</sup>, a visual analogue scale (VAS) relating to bladder pain, and patient perception of bladder condition (PPBC), was used to assess pelvic symptoms. Women were recruited on attendance to urogynaecology outpatient department appointments where they were asked to complete the questionnaire relating to pelvic pain, sexual function and bladder function. The data was inputted into SPSS v 21 (Chicago, USA). Using t-test corrected for multiple comparisons with the Bonferroni test and multivariate analysis to correct for age the premenopausal women were compared with postmenopausal women to assess the impact of menopausal status on IC symptom scores obtained from the ICSUPI and the PUF questionnaires, individual urinary symptoms, bladder pain and sexual function.

### Results

A total of 139 women were administered the combined questionnaire (mean age 47.1 +/- 16.5 years). The post-menopausal group (n= 53), were found to have significantly increased (p> 0.05) muscle and joint pain, nocturia, urgency, frequency and ICSUPI symptom scores (Table 1). Surprisingly the PUF symptom scores which included bladder symptoms used as a diagnostic indicator of interstitial cystitis (IC) were not significantly different between the 2 groups.

	Menopausal status	Mean	P value
Muscle or joint pain	post	5.151	0.026
	Pre	3.662	0.029
Need to urinate with little or no warning	post	2.547	0.041
	pre	1.896	0.038
Urination less than 2 hours after last finished urinating	Post	3.189	0.022
	Pre	2.487	0.023
Typical urination at night	Post	2.745	0.017
	Pre	2.006	0.017

Although sexual dysfunction and pain did not significantly differ between the pre and post-menopausal groups, both symptoms were found to be closely associated with PPBC in both groups but not related to age (p <0.05, Pearson correlation).

### Interpretation of results

Independent of age, menopausal status appears to have a significant impact on pelvic symptoms including nocturia, urgency, frequency, muscle and joint pain and other bladder symptoms associated with Interstitial Cystitis based the ICSIP questionnaire. However, menopausal status does not appear to have a relationship with the PUF scores highlighting the difficulty in assessing these symptoms.

The prevalence of sexual dysfunction and pain, along with their close correlation with PPBC and other bladder symptoms highlights the need for a specific and validated questionnaire to assess pelvic specific pain and sexual dysfunction in those with urinary symptoms.

### Concluding message

Menopausal status has an impact on pelvic symptoms including sexual dysfunction and pain as well as lower urinary tract symptoms. This relationship needs to be investigated further with the development of a questionnaire covering all these aspects of pelvic symptoms and function.

### References

1. International Pelvic Pain Society. Pelvic pain assessment tool.
2. Urology 1997; 49(5A): 58-63.
3. Urology 2002; 60(4): 573-578.

Disclosures

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