

## EVALUATION OF SYMPTOM AND PROBLEM INDEX IN PAINFUL BLADDER SYNDROME

Recent studies revealed that many cases of pelvic pain may be related to interstitial cystitis (IC). IC is a chronic inflammatory disease affecting urinary bladder wall due to the epithelial dysfunction. Several validated tools have been reported to quantify the symptoms of IC. The O'Leary - Sant Interstitial Cystitis Symptom Index (ICS) and Interstitial Cystitis Problem Index (ICPI) are useful in measuring urinary frequency and bladder discomfort. The aim of this prospective study was to examine whether urinary symptoms are increased only in patients with IC and how the score of ICS and ICPI is changing after the treatment.

### Study design, materials and methods

A total number of 20 female patients with IC and 20 healthy female controls were recruited for this study from September 2003 to September 2005. All patients had to meet the symptom criteria established by the NIDDKD. The mean age of the IC patients was  $43.1 \pm 11.8$  years. The age of the control group was  $37.8 \pm 6.1$  years. All IC patients underwent cystoscopy under anesthesia with bladder distension. The O'Leary - Sant Interstitial Cystitis Symptom Index (ICS) and Interstitial Cystitis Problem Index (ICPI) - questions related to IC symptoms and IC problems - were administered to all patients. IC patients were treated by the application of intravesical heparin. The assessment of ICS and ICPI in patients with IC has been completed again after 6 months of the intravesical administration of 10.000 IU heparin twice weekly.

### Results

The average score of ICS before the treatment was  $18 \pm 3$ , the average score of ICPI was  $14 \pm 3$  in IC patients whilst the median score was around zero in all healthy controls. The intravesical application of heparin led to a significant improvement of the ICS and ICPI score assessment. The average score of ICS after treatment was  $11 \pm 3$  and the average score of ICPI was  $6 \pm 2$ .

### Interpretation of results

The O'Leary - Sant Indexes (ICS and ICPI) are useful in measuring urinary frequency and bladder discomfort. Urinary symptoms were significantly increased in IC patients compared to healthy controls. The score assessment of ICS and ICPI has shown a significant decrease after application of intravesical heparin in all patients with IC in our study. The disadvantage of ICS and ICPI is that they do not address dyspareunia or pelvic pain, since they do not include questions on general symptoms.

### Concluding message

It is important to rely on an instrument to measure IC symptoms not only at the time of the diagnosis but to detect changes in symptom perception during the course of disease or of the treatment. The administration of ICS and ICPI was found to be useful tool in the management of IC patients.

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**HUMAN SUBJECTS:** This study was approved by the General Teaching Hospital, Prague, Czech Republic and followed the Declaration of Helsinki Informed consent was obtained from the patients.