

**PHENOTYPING OF PAINFUL BLADDER SYNDROME/INTERSTITIAL CYSTITIS BY PAIN SEVERITY,**Hypothesis / aims of study:

Painful Bladder Syndrome/Interstitial Cystitis patients present with diverse symptoms; we sought to determine if characterizing patients by pain severity might allow a new framework to generate and test hypothesis regarding etiology and therapy. We initially concentrated on patients with severe pain.

Study design, materials and methods

Methods: 186 patients with a clinical diagnosis of PBS/IC completed an intake form which included report of current pain on a 0-to-10 scale and questions including current age, character of onset, duration, associated conditions and effects of diet. Pain severity was grouped into mild-moderate ( 0-7 ) n=154, as opposed to severe ( pain score >7 ) n=32; chi-square and t-test statistics were performed using SPSS Statistical software with P<0.05 as possibly clinically significant. This study is limited by the single time point utilized to codify pain severity as well as retrospective and subjective nature of patient reports on associated conditions such as irritable bowel syndrome, migraine etc. Institutional approval was obtained for data review.

Results

Pain severity it did not appear to correlate by age of patient, duration of symptoms, rapidity of onset, dietary food sensitivities, or history of irritable bowel syndrome (IBS), anxiety, migraine, or exacerbation of symptoms during menstrual cycle. Patients with severe pain did appear to differ in having increased frequency of history of chronic constipation, endometriosis, dysmenorrhea, asthma, perceived social stress and history of abuse. Patients who perceived their IC symptoms to begin without a specific cause tended to have lower pain scores and mild severity than those to attributed onset of their symptoms to acute bacterial cystitis or pelvic surgery/trauma. Patients having severe pain were less likely to report benefit with prior hydrodistension, reported a greater impact on ability to work and more problems with voiding (as opposed to storage) than those with milder pain scores.

Interpretation of results

The increased history of noxious stimuli (UTI, pelvic surgery, dysmenorrhea, endometriosis) in patients with severe pain is consistent with concepts of crosstalk and central sensitization; the possibility exists that the severity of the initial insult carries forward in degree of chronic pain severity by contributing to local/regional stimulation of pain pathways and can be exacerbated by coping problems of stress/abuse which might alter central processing of pain. Larger prospective longitudinal studies with multivariate analysis are needed in the future.

Concluding message

Pain severity may be worthy of additional study in phenotyping of PBS/IC patient populations.

<b><i>Specify source of funding or grant</i></b>	<b>NONE</b>
<b><i>Is this a clinical trial?</i></b>	<b>No</b>
<b><i>What were the subjects in the study?</i></b>	<b>HUMAN</b>
<b><i>Was this study approved by an ethics committee?</i></b>	<b>Yes</b>
<b><i>Specify Name of Ethics Committee</i></b>	<b>University of Rochester Human Subjects Review Board</b>
<b><i>Was the Declaration of Helsinki followed?</i></b>	<b>Yes</b>
<b><i>Was informed consent obtained from the patients?</i></b>	<b>No</b>