

Clinical Diagnostic Tools for Bladder Pain Syndrome



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Despite global recognition of **“Bladder Pain Syndrome”** as a separate entity, there is no gold standard diagnostic test and no definitive pattern for management resulting in wide range in practice patterns [1]. Therefore, these clinical diagnostic tools should be used as an adjunct in diagnosis, evaluation and management. For example these can be used to monitor treatment responses and changes in symptom severity and could be very useful for clinical trials [2].



Questionnaires/ Scales

The O’Leary–Sant Symptom Index & Problem Index [3]: It comprises 2 brief self-administered indices for measuring lower urinary tract symptoms and their impact in patients with IC. This questionnaire originally was not developed for diagnosis purposes, but several studies [4,5] have successfully used it as a screening tool as it appears to discriminate between patients with and without IC.

The Pain, Urgency, Frequency (PUF) Symptom Scale [6]: This was designed to give a balanced attention to symptoms of urinary urgency/frequency, pelvic pain, and symptoms associated with sexual intercourse in patients of IC. At that time, they used the intravesical potassium test to validate this questionnaire and reported the prevalence of IC as high as 1 in 4.5 women

The University of Wisconsin Interstitial Cystitis (UW-IC) Inventory: It was based on 7 questions (scale 0–6) related to urinary symptoms embedded in a longer questionnaire (18 items) including other body systems [7].

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The Bladder Pain/Interstitial Cystitis Symptom Score: It was developed as a self-report measure that can reliably identify moderate-severe bladder pain syndrome for inclusion into clinical trials with a sensitivity of 0.72 and specificity of 0.86 and can also be used to assess efficacy of treatments [8]. VAS scale was found superior to the ICSI for the analysis of the pain associated with BPS.

Apollo Clinical Scoring System (ACS): The recently published study by **Taneja R. (President GIBS)** suggests that this newly devised scoring system for use of management of patients of BPS/IC is an internally consistent and reliable scoring system [10] and superior to previous available scores.

Voiding Diary

Watcher et al. in 2003 first proposed to include patient sensations at voiding with volume intake and output for 3 days at initial evaluation to identify patients of BPS/IC [11].

Later Kim study confirmed that some voiding characteristics of Bladder Pain Syndrome/Interstitial Cystitis and Overactive Bladder patients differ significantly as per 3-day voiding diary records. BPS/IC patients have the relatively constant voiding pattern. They void more frequently with shorter intervals, constantly with smaller volumes and a narrower range of changes in voided volume with significantly smaller maximal bladder capacity than that of OAB patients. An editorial comment on this study explained the difference due to permanent change of fibrosis) in BPS/IC patients but not to the habit of urination, while voided volumes in OAB patients fluctuates due to different range of uninhibited detrusor contractions [12].

Food Diary

To follow a pattern of elimination diet can help BPS/IC patients. During first week patients record the onset of voiding symptoms and pain levels on normal food and beverage consumption and then for next 2 weeks, they consume a diet constructed from the list of foods that are least bother some and again records are maintained. Lastly, the patients should methodically re-introduce test foods, with a waiting period of 3 days before each new introduction. This process will result in a list of foods and beverages that are least offensive. The value of this approach rests with its ability to detect and avoid foods that appear to trigger symptoms on individual basis. It also prevents patients from eliminating more foods than necessary, so that they continue to meet their nutritional requirements [13].





Conclusion

The ideal Clinical diagnostic tool for BPS should assess urinary symptoms, pain, quality of life and sexual health, but none of the available tools fulfil all the criteria if used separately. Therefore, for comprehensive assessment, several questionnaires are often used simultaneously. The recently published Apollo Clinical Scoring System (ACS) is showing promising results [10]. Its use should be encouraged in future research and continued efforts should be made to develop new clinical diagnostic tools that can address current shortcomings.

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THE AUTHOR

Dr. Amita Jain

Senior Consultant Urogynecology
Medanta Institute of Urology & Robotic Surgery
MEDANTA - THE MEDICITY HOSPITAL GURUGRAM, INDIA



Apollo Clinical Scoring System for Interstitial Cystitis / Bladder Pain Syndrome

1. Urgency (0-5)

How often have you felt the strong need to urinate with little or no warning?

0. Not at all
1. Less than 1 in 5 times
2. Less than half the time
3. About half the time
4. More than half the time
5. Almost always

2. Frequency (0-5)

How often have you had to urinate less than 2 hours after you finished urinating?

0. Not at all
1. Less than 1 time in 5
2. Less than half the time
3. About half the time
4. More than half the time
5. Almost always

3. Nocturia (0-10)

How often did you most typically get up at night to urinate?

0. Never
2. Once
4. 2 times
6. 3 times
8. 4 times
10. 5 times or more

4. Pain (0-20)

Have you felt Burning, pain, discomfort, or pressure in your bladder?

0. Not at all
4. Once a day
8. A few times a day
12. Fairly often
16. Almost always
20. Persistent pain that is not reduced after emptying bladder

5. Sexual dysfunction (0-5)

A) Female

0. No problem in sexual activity
1. Can engage in sexual activity with minimal discomfort.
2. Non-penetrative genital contact can be tolerated.
3. No genital contact can be tolerated.
4. Vulvodynia
5. Aversion to sexual thoughts

B) Male

0. No problem in sexual activity
1. Post ejaculatory discomfort.
2. Moderate to severe pain post ejaculation
3. Pain at the time of erection
4. Complete loss of erection
5. Loss of libido with ED

6. Psychological impact (0-5)

How much have the symptoms bothered you mentally (score 0-5):

0. No problem
1. Very small problem
2. Small problem
3. Medium problem
4. Big problem
5. Suicidal tendency

Total Score..... / 50



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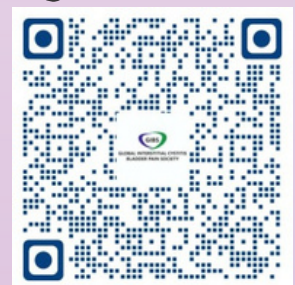
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LAST DATE FOR SUBMISSION: MAY 31ST, 2024

- ✔ Presentation Format: In Person
- ✔ Date: 25th August 2024
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