

Diagnostic and Therapeutic Approaches to BPS/IC Among Functional Urologists in Türkiye

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What's known on the subject? and What does the study add?

Bladder pain syndrome/interstitial cystitis (BPS/IC) is a chronic condition with an unclear aetiology and heterogeneous clinical presentation. Significant variability exists in diagnostic and therapeutic approaches to BPS/IC across different countries and healthcare systems. International guidelines recommend a stepwise, multimodal approach, yet real-life adherence remains inconsistent. This study provides the first nationwide overview of diagnostic and treatment practices for BPS/IC among Turkish urologists specializing in functional urology. It highlights substantial variation in clinical decision-making and guideline preference, with many physicians managing BPS/IC independently. The findings reveal low self-perceived competence among physicians, emphasizing the need for standardized guidelines, multidisciplinary collaboration, and targeted educational initiatives.

Abstract

Objective: Bladder pain syndrome/interstitial cystitis (BPS/IC) is a chronic condition with unclear aetiology that significantly impairs quality of life. This study aimed to evaluate the diagnostic and treatment practices among Turkish urologists specializing in functional urology.

Materials and Methods: Between January and May 2025, 126 urologists completed a 36-question online survey covering demographics, diagnostic methods, treatment preferences, and guideline use. Data were analysed descriptively.

Results: Autoimmunity was most frequently considered as an etiological factor (45.2%). More than half of the physicians (51.6%) independently planned diagnoses and treatments, while referrals were most often for physical therapy and rehabilitation (14.5%). Cystoscopy with hydrodistension (77.8%) and physical examination for bladder fullness and tenderness (81.7%) were the most commonly applied diagnostic methods. Guidelines from the Turkish Continence Society (54.8%) and the European Association of Urology (38.9%) were predominantly used. Oral pentosan polysulphate (88.9%) and conservative measures (81%) were the most common treatments. Intravesical therapy favoured hyaluronic acid monotherapy (57.1%) or lidocaine-NaHCO₃-heparin cocktails (27%). Surgical interventions primarily included laser or transurethral resection ablation for Hunner lesions (67.5%), while neuromodulation techniques were less commonly applied. Only 31.4% of physicians felt fully competent in managing BPS/IC.

Conclusion: This study reveals notable variability in BPS/IC management among Turkish urologists specializing in functional urology. Few physicians felt fully competent in treating the condition, highlighting ongoing clinical challenges and underscoring the need for standardized guidelines, multidisciplinary care, and continued education.

Keywords: Basic science, functional urology, general urology

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Introduction

Bladder pain syndrome/interstitial cystitis (BPS/IC) is defined by the International Continence Society (ICS) as persistent or recurrent chronic pelvic pain, pressure, or discomfort perceived to be related to the urinary bladder, accompanied by at least one other urinary symptom such as urgency or frequency. The ICS recommends reserving the term “Interstitial Cystitis” for patients who exhibit characteristic cystoscopic and histological findings (1). Currently, there is no universally accepted terminology, definition, or standardized approach for the optimal management of BPS/IC (2,3). While the European Association of Urology (EAU) guidelines report a prevalence of 0.06-30% (4), the rate in the United States has been reported as 2.9-4.2% (5). The prevalence among women and men ranges from 0.004% to 11.2% and 0.01% to 6.2%, respectively (6,7).

The aetiology has not yet been fully elucidated. Any initial insult that causes urothelial damage, neurogenic inflammation, and pain is thought to trigger BPS/IC. It has not been directly associated with any infection. However, urinary tract infections during childhood and adolescence have been reported to be significantly more frequent in adults with BPS/IC (8). BPS/IC may also represent a manifestation of a systemic disorder. Associations have been reported between BPS/IC and non-bladder syndromes such as fibromyalgia, irritable bowel syndrome, vulvodynia, depression, panic disorders, migraine, allergy, asthma, and systemic lupus erythematosus (9,10).

Since the pathophysiology of the disease is not fully understood, diagnostic and treatment protocols are not standardized. Management of this syndrome requires close collaboration between the physician and the patient. Nevertheless, the therapeutic success remains limited. For this reason, BPS/IC poses significant challenges for both patients and physicians.

Approaches to managing this poorly understood syndrome or disease vary widely among physicians. Previous studies have shown differences in physicians' clinical practice toward this patient group (11,12). We believe that evaluating these differences in terms of aetiology, diagnosis, and treatment is a step forward in achieving consensus and optimizing treatment outcomes. This study aims, for the first time, to evaluate the diagnostic and therapeutic approaches used by Turkish urologists specializing in functional urology.

Materials and Methods

This study was conducted in accordance with the principles of the Declaration of Helsinki. Between January and May 2025, a link to a 36-item online survey was emailed to urologists across Türkiye. Ethics committee approval was not required because this study was a voluntary anonymous, questionnaire-

based survey conducted among physicians and did not include patient involvement or identifiable personal data. The design and reporting of this web-based survey were informed by the Checklist for Reporting Results of Internet E-Surveys guidelines, with pragmatic adherence to items applicable to the study design.

The surveys were distributed via the Turkish Continence Society membership email list. All responses were recorded anonymously, and participation was voluntary. No compensation was provided for completing the survey. Responses from 126 physicians interested in functional urology were analyzed. Physicians with an academic rank of specialist or higher were included in the study. Residents were excluded. This questionnaire did not disclose the identity of the hospital or the identities of the patients or physicians.

The survey was developed by the Turkish Continence Society BPS/IC Group and comprised 36 questions that assessed management approaches to BPS/IC. The survey recorded physicians' demographic characteristics, academic titles, current affiliation, clinical experience, diagnostic tools, treatment strategies, and guideline use. Questions included both single- and multiple-choice formats.

The test-retest reliability was evaluated using R. Surveys were administered to an 18-person pilot group with a two-week interval between administrations. For multiple-choice items, Cohen's kappa coefficients ranged from 0.729 to 1.000, indicating substantial to perfect agreement. For continuous variables, the intraclass correlation coefficient ranged from 0.78 to 0.85, reflecting strong consistency across measurements. Overall, these results indicate that the survey has good repeatability. The questionnaire used in this study was developed not as a psychometrically validated outcome measure but rather to describe diagnostic and therapeutic practices and overall clinical approaches to BPS/IC. Accordingly, the test-retest analysis was conducted to assess the temporal consistency of the survey items and did not represent a formal construct validity assessment for patient-reported outcome measures.

Statistical Analysis

Statistical analyses were performed using IBM SPSS Statistics, version 25.0 (IBM Corp., Armonk, NY, USA); results were presented as counts and percentages, and medians and interquartile ranges were reported for continuous variables.

Results

The survey link was emailed to 230 physicians involved in functional urology. Of these, 126 physicians (55%) completed the survey. The median age was 42 years (range: 37-69), and the majority were male (120/126, 95.2%). The median duration of

practice as a specialist was 11 years (range: 1-41 years). Academic ranks included specialists (n=51, 40.5%), assistant professors (n=14, 11.1%), associate professors (n=33, 26.2%), and professors (n=28, 22.2%). Participants were affiliated with state hospitals (n=43, 34.1%), university hospitals (n=53, 42.1%), private hospitals (n=24, 19%), or private practice (n=6, 4.8%) (Figure 1).

The main etiological factors identified for BPS/IC were autoimmune disorders (45.2%), followed by unknown causes (38.1%), psychogenic factors (5.6%), infections (5.6%), neurological disorders (3.2%), and genetic factors (2.4%). In a seconder analysis, autoimmune etiology remained the most common (29.4%), followed by infection (23%), psychogenic causes (13.5%), neurological causes (10.3%), genetic causes (10.3%), and unknown causes (13.5%) (Table 1).

Regarding diagnostic and treatment approaches, 51.6% of respondents indicated that they managed their diagnosis and treatment independently, 36.5% referred patients to specialized centres after establishing the diagnosis, and 11.9% directly referred patients to specialized centres. Among referrals, female urology was the most common specialty (69.4%), followed by physical therapy and rehabilitation (14.5%), algology (9.7%), and urogynaecology (6.5%).

The median number of BPS/IC patients treated per year was 15 (range: 2-250). Most male and female patients were aged 20-60 years (94% and 99.2%, respectively). Over the last five years, 35.5% of respondents diagnosed patients younger than 20 years of age. The median number of male BPS/IC patients treated by respondents was 5 (range: 3-300), with 77.8% reporting that male patients represented less than 10% of their total population. Regarding self-assessed competency in managing BPS/IC patients, 31.4% considered themselves competent, 55.1% considered themselves partially competent, and 13.6% considered themselves not competent (Table 2).

The most frequently used diagnostic methods were cystoscopy with hydrodistension (77.8%), physical examination (68.3%), questionnaires (62.7%), cystoscopy with bladder biopsy (60.3%), and diagnosis of exclusion (54.8%). Urodynamic studies were used less frequently (15.9%). Pertinent physical examination maneuvers included abdominal palpation to assess bladder fullness or tenderness (81.7%), pelvic floor palpation (64.3%), bimanual examination (34.1%), rectal examination in males (44.4%), and neurological assessment (31.0%). The most frequently referenced guidelines were the Turkish Continence Society (54.8%), the EAU (38.9%), the ICS (26.2%), the European Society for the Study of Interstitial Cystitis (12.7%), and the American Urological Association (AUA) (7.9%). Cystoscopy techniques varied, including assessment of bladder capacity under anaesthesia (58.5); low-pressure short-duration hydrodistension (29.4); hydrodistension at 80-100 cm H₂O for 1-2 minutes in two cycles (28.6); bladder filling at 80 cm H₂O until infusion stopped and waiting for 3 minutes (25.4); cystoscopy performed under local anaesthesia; if a Hunner lesion is identified, it is continued under general anaesthesia (20.6%). Only 17.5% of respondents considered the available diagnostic tools sufficient (Table 2).

Conservative approaches (81%), oral therapy (92.1%), intravesical therapy (73.8%), and hydrodistension (73.8%) were widely applied. Surgical or ablative procedures were performed by 38.9% of respondents, whereas pelvic floor rehabilitation and neuromodulation were employed by 34.1% and 19%, respectively. Conservative management included patient education (89.7%), dietary modifications (84.1%), fluid management (68.3%), bladder training (59.5%), stress management (58.7%), pain education (51.6%), physical therapy (21.4%), and psychotherapy (27.8%). Only 20.6% reported having access to a pelvic-floor physical therapy team/unit or collaborating with one. Among oral therapies, pentosan polysulphate was most commonly used (88.9%); other commonly used agents included non-steroidal

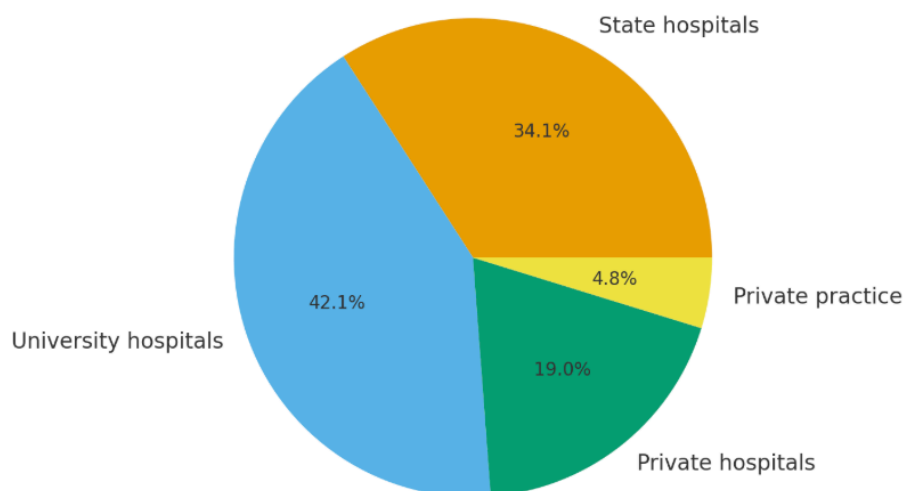


Figure 1. Physicians profile

Table 1. Approach and patient profile

Variable	n (%)
Main etiological factor	Autoimmune: 57 (45.2) Unknown: 48 (38.1) Psychogenic: 7 (5.6) Infection: 7 (5.6) Neurological: 4 (3.2) Genetic: 3 (2.4)
Second most important factor	Autoimmune: 37 (29.4) Infection: 29 (23) Psychogenic: 17 (13.5) Neurological: 13 (10.3) Genetic: 13 (10.3) Unknown: 17 (13.5)
Diagnostic/treatment approach	Self-plan diagnosis & treatment: 65 (51.6) Diagnose & refer to higher centre: 46 (36.5) Directly refer: 15 (11.9)
Referred specialty	Female urology: 43 (69.4) Physical therapy and rehabilitation: 9 (14.5) Algology: 6 (9.7) Urogynaecology: 4 (6.5)
Number of BPS patients treated in the last year (min-max)	15 (2-250)
Male patients by age group	<20: 3 (2.6) 20-40: 59 (50.4) 40-60: 51 (43.6) >60: 4 (3.4)
Female patients by age group	<20: 0 20-40: 56 (47.5) 40-60: 61 (51.7) >60: 1 (0.8)
Patients under the age of 20 diagnosed in the last 5 years	1: 6 (4.8) 2-3: 28 (22.6) 4-5: 6 (4.8) >5: 4 (3.2) None: 80 (64.5)
Number of male BPS/IC patients you have treated so far? Median (min-max)	5 (3-300)
What is the proportion of male patients among your total patient population?	<10%: 91 (77.8) 10-30%: 19 (16.2) 30-50%: 4 (3.4) 50%: 3 (2.6)
Do you consider yourself competent in managing BPS/IC patients?	Yes: 37 (31.4) Partially: 65 (55.1) No: 16 (13.6)
BPS: Bladder pain syndrome, IC: Interstitial cystitis	

anti-inflammatory drugs (NSAIDs) (54%), anticholinergics (52.4%), amitriptyline (42.1%), and antihistamines (39.7%). Before starting pentosan polysulphate, 32.8% of patients requested an ophthalmology consultation. Periodic ophthalmology follow-up was recommended annually in 42.4%, every six months in 21.4%, every 3 months in 6.3% whereas 38.1% did not deem it necessary. Treatment duration with pentosan polysulphate varied as follows: 3 months (18.4%), 6 months (28.8%), 1 year (42.4%), 3 years (6.4%), and more than 3 years (4%). Treatment success was

most frequently assessed at the 3rd-month (65.1%) and 6th-month (29.4%) follow-ups. Intravesical agents used as monotherapy included hyaluronic acid (57.1%), pentosan polysulphate (21.4%), lidocaine (40.5%), and heparin (35.7%). Combination regimens were less commonly preferred, with lidocaine-NaHCO₃-heparin and bupivacaine-heparin-hydrocortisone-NaHCO₃ used by 27% and 9.5%, respectively (Table 3).

Surgical management consisted of Hunner lesion ablation (with laser or transurethral resection) (67.5%), botulinum toxin injections (40.5%), sacral nerve stimulation (12.7%), and cystectomy (9.5%). Regarding neuromodulation, 37.3% did not offer it as part of treatment, 46% referred appropriate patients to specialized centres, and 16.7% performed it independently. Preferred neuromodulation techniques included sacral neuromodulation (21.4%), posterior tibial nerve stimulation (15.9%), and pudendal nerve stimulation (2.4%); dorsal genital nerve stimulation was not reported (Table 4).

Discussion

In this survey of BPS/IC management practices, several key findings emerge that highlight both clinical trends and gaps in care. Autoimmune and unknown aetiologies were reported as the most common causes, reflecting the complex and multifactorial nature of the disease. Despite the high prevalence of the condition, male patients remain a minority in clinical practice, with most clinicians treating fewer than five male BPS/IC patients and over three-quarters reporting that men comprise less than 10% of their patient populations. Diagnostic approaches were dominated by cystoscopy with hydrodistension and by physical examination, yet only a minority of respondents considered the current tools sufficient, underscoring the ongoing need for standardized, reliable diagnostic methods. Treatment strategies were predominantly conservative, with patient education, dietary modification, and oral therapies such as pentosan polysulphate being widely employed. Notably, neuromodulation and intravesical therapies were used less frequently, often limited by access to services or by clinicians' expertise. We believe that high cost contributes significantly to the underutilization of neuromodulation. The Turkish Social Security Institution reimburses the cost of sacral neuromodulation only when the procedure is performed at tertiary-level public healthcare institutions with an accredited training clinic. Surgical interventions, including Hunner lesion ablation, remained essential in selected cases. Overall, the data reveal a pattern of reliance on conservative and oral therapies, variable use of advanced interventions, and persistent challenges in diagnosing and managing male patients with BPS/IC, emphasizing the need for broader awareness, guideline adherence, and multidisciplinary care.

Table 2. Diagnostic approach

Method	n (%)
Cystoscopy & hydrodistension	98 (77.8)
Potassium sensitivity test	3 (2.4)
Physical examination	86 (68.3)
Questionnaires	79 (62.7)
Biopsy & cystoscopy	76 (60.3)
Exclusion diagnosis	69 (54.8)
Urodynamics	20 (15.9)
Physical examination specifics	Abdomen for bladder fullness/tenderness: 103 (81.7) Pelvic floor palpation: 81 (64.3) Bimanual examination: 43 (34.1) Male rectal examination: 56 (44.4) Neurological: 39 (31)
Guidelines used	Turkish Continence Society: 68 (54.8) EAU: 49 (38.9) ICS: 33 (26.2) ESSIC: 16 (12.7) AUA: 10 (7.9)
Cystoscopy technique	Bladder capacity under general anaesthesia: 72 (58.5) Low-pressure (60-80 cm H ₂ O) short duration (<10 minutes) hydrodistension: 37 (29.4) Hydrodistension at a pressure of 80-100 cm H ₂ O for 1-2 minutes, in 2 cycles: 36 (28.6) I fill the bladder at a pressure of 80 cm H ₂ O until the infusion stops and then wait for 3 minutes: 32 (25.4) I perform cystoscopy under local anaesthesia; if I see a Hunner lesion, I apply general anaesthesia: 26 (20.6) I take a cytology sample: 24 (19) I perform bladder biopsy on all patients: 38 (30.2)
Do you think the diagnostic tools are sufficient?	22 (17.5)
EAU: European Association of Urology, ICS: International Continence Society, ESSIC: International Society for the Study of Bladder Pain Syndrome, AUA: American Urological Association	

Similar studies have examined urologists' approaches to the management of BPS/IC. In a study by Kivlin et al. (12), which included 95 urologists, most of whom practiced general urology, 47% considered the aetiology unknown, similar to the 38.1% recorded in our study. The majority of participants in this study were general urologists. However, 45% of physicians in our study attributed the condition to autoimmunity. We suggest that when physicians refer to autoimmunity, they may actually mean local inflammation. The most commonly used diagnostic method in Kivlin et al.'s (12) study was cystoscopy with hydrodistension (70%), followed by validated symptom scores (65%). Similarly, in our study, cystoscopy and hydrodistension were the most frequently used diagnostic tools (77.8%), while the second most frequently used diagnostic tool was physical examination (68.3%). The use of symptom scores in our study also occurred at similar rates. We consider that the greater emphasis on physical examination in our study was related to the study population, which consisted mainly of physicians involved in functional urology. In this patient group, physical examination is an important component of the diagnostic evaluation. As in our study, oral medications were the most commonly used treatment (92%), with pentosan polysulphate the most frequently chosen agent. A survey of

physicians practicing in the United States reported that only 15% followed the AUA (12). In our study, the Turkish Continence Society guidelines were followed in 54.8% of cases. We contend that the high adherence of physicians in our country who work in functional urology to their national society's guidelines is partly due to the ease of online access to those guidelines and to the fact that they summarize the key recommendations of all major international guidelines.

Clemens et al. (11) aimed to describe the practice patterns among 290 primary care physicians who manage patients with symptoms suggestive of BPS/IC. Unlike in our study, a clinical vignette describing a woman with typical BPS/IC symptoms was prepared to assess physicians' knowledge of aetiology, management strategies, and familiarity with the syndrome. Two-thirds of the participants correctly identified the hallmark symptom of BPS/IC (bladder pain/pressure). Regarding aetiology, 90% correctly indicated that BPS/IC is a non-infectious disease, 76% correctly reported that it is not caused by a sexually transmitted infection, and 61% correctly indicated that it is not caused by a psychiatric illness. Common treatments included antibiotics and NSAIDs, and referrals were often made to a specialist. This was another research effort highlighting

Table 3. Treatment approach

Treatment	n (%)
Conservative	102 (81)
Oral	116 (92.1)
Intravesical	93 (73.8)
Hydrodistension	93 (73.8)
Surgical/ablative	49 (38.9)
Pelvic floor rehabilitation	43 (34.1)
Neuromodulation	24 (19)
Conservative management	Patient education: 113 (89.7) Diet education: 106 (84.1) Fluid management: 86 (68.3) Bladder training: 75 (59.5) Stress management: 74 (58.7) Pain education: 65 (51.6) Physical therapy: 27 (21.4) Psychotherapy: 35 (27.8)
Does your institution have a pelvic floor physical therapy team/unit, or do you collaborate with one?	26 (20.6)
Oral therapy	Pentosan polysulphate: 112 (88.9) Amitriptyline: 53 (42.1) Antihistamines: 50 (39.7) Anticholinergics: 66 (52.4) NSAIDs: 68 (54)
Do you request ophthalmology consultation before starting pentosan polysulphate treatment?	41 (32.8)
Do you request periodic ophthalmology consultations after initiating pentosan polysulphate treatment?	No: 48 (38.1) Per 3 months: 8 (6.3) Per 6 months: 27 (21.4) Per 1 year: 53 (42.4)
For how long do you keep your patients on pentosan polysulphate treatment?	3 months: 23 (18.4) 6 months: 36 (28.8) 1 year: 53 (42.4) 3 year: 8 (6.4) >3 year: 5 (4)
At which month of treatment do you assess the success of pentosan polysulphate treatment?	3 rd month: 82 (65.1) 6 th month: 37 (29.4) 1 st year: 7 (5.6)
Intravesical therapy	Monotherapy: Hyaluronic acid: 72 (57.1) Pentosan polysulphate: 27 (21.4) Lidocaine: 51 (40.5) Heparin: 45 (35.7) Cocktails: I don't prefer: 62 (49.2) Lidocaine, NaHCO ₃ , heparin: 34 (27) Bupivacaine, heparin, hydrocortisone, NaHCO ₃ : 12 (9.5)
NSAIDs: Non-steroidal anti-inflammatory drugs	

deficiencies in the management of patients with BPS/IC. We propose that differences in disease management exist not only among general urologists but also among physicians involved in functional urology.

In a similar study, Marsh et al. (13) included 100 gynaecologists and urologists to assess physicians' knowledge of BPS/IC. Most

participants (83%) knew that urgency, frequency, and pain are required for the diagnosis of BPS/IC; however, few were aware of the inclusion and exclusion criteria. As in our study, a minority of participants underwent double filling during cystoscopy. Urologists with a special interest in female urology answered approximately 75% of questionnaire items correctly, whereas general gynaecologists answered less than 40% correctly. This

Table 4. Surgical approach

Surgical management	Hunner lesion laser/TUR ablation: 85 (67.5) Sacral nerve stimulation: 16 (12.7) Botulinum toxin: 51 (40.5) Cystectomy: 12 (9.5)
Do you apply neuromodulation therapy in your daily practice?	Not among my treatment options: 47 (37.3) I refer appropriate patients to a specialized centre/person: 58 (46) I apply it myself: 21 (16.7)
What is your preferred neuromodulation technique?	Sacral neuromodulation: 27 (21.4) Posterior tibial nerve stimulation: 20 (15.9) Dorsal genital nerve stimulation: 0 Pudendal nerve stimulation: 3 (2.4)

TUR: Transurethral resection

study differs from ours in that it compares the approaches of two physician groups.

A study by Kiyota et al. (14) investigated Japanese urologists' diagnostic and treatment approaches to a similar medical condition, chronic prostatitis/chronic pelvic pain syndrome (CP/CPPS). In this study, 1,869 urologists were mailed a 17-item questionnaire. As in our study, varying approaches to diagnosis, treatment, and management were observed. Although 63.8% of urologists considered CP/CPPS non-infectious, most still chose antimicrobial agents as the primary treatment. Additionally, 52.2% of urologists felt more pessimistic about managing CP/CPPS than about treating BPH or prostate cancer, due to frequent patient complaints and their own lack of confidence in diagnosis and treatment. Similarly, in our study, only 31.4% of physicians considered themselves competent in managing BPS/IC. This study, like ours, highlights the need for further research to clarify the aetiology and pathogenesis of the disease and to establish guidelines for its diagnosis and treatment.

Given the clinical implications of the data obtained in this study, the observed variability in clinical approaches underscores the need for structured educational initiatives and the development of more detailed, standardized, guideline-based strategies, particularly in functional urology practice. Our study provides a contemporary overview of real-world diagnostic and therapeutic practices in the management of BPS/IC and may serve as a reference point for future clinical guideline updates. In addition, our findings may encourage a more multidisciplinary approach to the management of BPS/IC.

Study Limitations

This study has several limitations. First, it is based on a self-reported online survey, which may be subject to response and recall bias. Second, since data were not collected through patient case histories, the effectiveness and outcomes of the reported diagnostic and treatment approaches could not be evaluated. We consider that in studies of this type, providing sample patient scenarios and assessing physicians' diagnostic and treatment

preferences based on these cases could also be beneficial. In addition, the survey instrument, while prepared by the Turkish Continence Society Bladder Pain Syndrome Study Group, was not validated internationally, and variation in respondents' adherence to guidelines may affect comparability. Finally, the study reflects clinical practice in Türkiye at a specific point in time, which may limit its applicability to other regions or future contexts.

Conclusion

This study demonstrates significant variability in diagnostic and treatment approaches for BPS/IC among Turkish urologists, particularly those involved in functional urology. Notably, only a small proportion of physicians consider themselves fully competent in managing BPS/IC, reflecting the ongoing challenges posed by this poorly understood condition. These findings underscore the need for standardized guidelines, multidisciplinary care, and continuous education to improve diagnosis, treatment, and overall patient outcomes.

Ethics

Ethics Committee Approval: Ethics committee approval was not required because this study was a voluntary anonymous, questionnaire-based survey conducted among physicians and did not include patient involvement or identifiable personal data.

Informed Consent: Not necessary.

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Footnotes

Authorship Contributions

Surgical and Medical Practices: A.Ö.G., E.T.Ş., Concept: A.Ö.G., E.T.Ş., Ö.A., T.K., T.T., Design: A.Ö.G., E.T.Ş., Ö.A., T.K., T.T., Data Collection or Processing: A.Ö.G., T.A., Y.T., T.T., Analysis or Interpretation: T.A., Y.T., Literature Search: A.Ö.G., T.A., T.T., Writing: A.Ö.G., T.A., E.T.Ş., Ö.A., T.K., T.T.

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