

# Recommendations to the primary care practitioners and the patients for managing pelvic pain, especially in painful bladder syndrome for early and better prognosis

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Painful bladder syndrome (PBS) is a common disease presenting with chronic pelvic pain and discomfort with at least one urinary symptom with no identifiable cause. The etiology is still unknown, and the medication has limited effects on pelvic pain or other urinary symptoms. This article presents advanced insight regarding the approach to PBS, particularly pelvic pain for primary care practitioners and patients. We suggest six tips for medical staff and suspected patients for easy diagnosis and proper treatment of pelvic pain. These six tips cover: Self-awareness of the disease; immediate urine culture test; specifying the location

of pain urinary incontinence; frequency, or urgency without functional disorder of an overactive bladder helpful dietary control; complementary, and alternative medicine, and finding an expert. These tips might be helpful in advancing the schematic approach and in achieving better prognosis of PBS. Further study should be conducted to achieve better treatment for this disease, including development of a definitive test and diagnosis.

**Keywords:** Interstitial cystitis, Pelvic pain, Complementary therapies

## INTRODUCTION

Painful bladder syndrome (PBS) is defined as chronic (over 6 months) pelvic pain, pressure, or discomfort perceived to be related to the urinary bladder, accompanied by at least one other urinary symptom such as a persistent urge to void or frequency in the absence of an identifiable cause (van de Merwe et al., 2008). Therefore, PBS should be considered when pelvic pain with voiding symptoms of frequency and urinary urgency, or when experiencing recurrent urinary tract infection with urinary tract and pelvic pain. Of course, a number of doctors believe that there is no such disease or that it is rare (Warren, 2014); however, more than 10 million people in the United States who suffer from the above mentioned symptoms are misdiagnosed or have been neglected for years (Dyer and Twiss, 2014). In 2006, research suggested that up to 12% of women in the United States may have early symptoms of PBS, and approximately 400,000 people in the United

Kingdom suffer from PBS, of whom 90% are females and 10% are males (Nickel et al., 2010). In Korea, the prevalence of PBS is 0.12%, which is lower than that of Europe and the United States (Choe et al., 2011). Although it is not a life-threatening disease, the severity of symptoms can be excruciating, so that the decrement of quality of life is greater compared to those treated with hemodialysis for end-stage renal disease. Therefore, it is important to pay attention to this disease, not only for the incidence, but also for the severity of symptoms.

## THE IMPORTANCE OF CLEAR COMMUNICATION BETWEEN THE PATIENT AND THE DOCTOR: SIX TIPS FOR EASY DIAGNOSIS AND PROPER TREATMENT FOR PELVIC PAIN IN PBS

As urologists, each time we make a diagnosis and decide on

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**Table 1.** Six tips to medical staff and patients for easy diagnosis and proper treatment

1	Self-awareness of PBS is necessary
2	Recurrent infection history with negative culture result might indicate the possibility of PBS
3	Specify the location of pain like lower abdomen, urethra, vagina, pelvis, fundus, and so on.
4	If it is not overactive bladder nor inflammatory disease, PBS should be considered
5	Stress management, pain management via oral administration, behavior might be helpful
6	Find proper experts for early information and better prognosis

PBS, Painful bladder syndrome.

treatments for pelvic pain, clear communication between the patient and the doctor is of utmost importance. In general, patients do not share information about previous diagnosis and treatments from previous medical institutions, but rather only their current symptoms at the time of the visit. Effective and active communication between medical provider and patient would raise awareness of recurrent urinary tract infection and bladder pain syndrome, based on the erudite knowledge of the diseases. What do I mean by erudite knowledge? We suggest 6 tips to medical staff and patients for easy diagnosis and proper treatment (Table 1).

First, self-awareness of the disease is necessary. When there is pain around the pelvic floor, including pelvis, urethra, and vagina area, along with voiding dysfunction lasting more than 1 month, a pelvic related disease should be considered. Although PBS has been known as a female disease, recently, it appears that over a few million men also suffer from it (Hanno et al., 2011). The most important characteristic in men is that pain comes from not only the lower abdomen, urethra, or lumbar, but also testicles, scrotum, anus, and perineum area; moreover, a patient might have pre-diagnosed prostatism and prostatitis.

Second, if the patient has any history of urinary tract infection from repeated prostatitis, cystitis, or vaginitis, but no urine culture test has been performed to check for infection, an immediate urine culture test is required. A negative result indicates the possibility of the disease.

Third, specify the location of pain mentioned above: lower abdomen, urethra, vagina, pelvis, fundus, and so on. Pain associated with certain activities such as sexual intercourse or ejaculation may be related to another cause.

Fourth, if it is not a functional disorder of an overactive bladder with urinary incontinence, frequency, or urgency nor inflammatory disease such as pelvic inflammation or urinary tract infection,

PBS should be considered.

Fifth, when each of the four tips listed above matches the patient's symptoms, stress management, pain management via oral administration, behavior that induces the symptom, and need for dietary control should be well explained. Drinking enough water helps in prevention of urine concentration, and consuming alcohol, artificial sweeteners, caffeinated or carbonated drink, citron fruit juice, and spicy cuisine may exacerbate the symptoms (Carinci et al., 2013). Hot or cold pack on the painful area may reduce the pain itself (Chaiken et al., 1993).

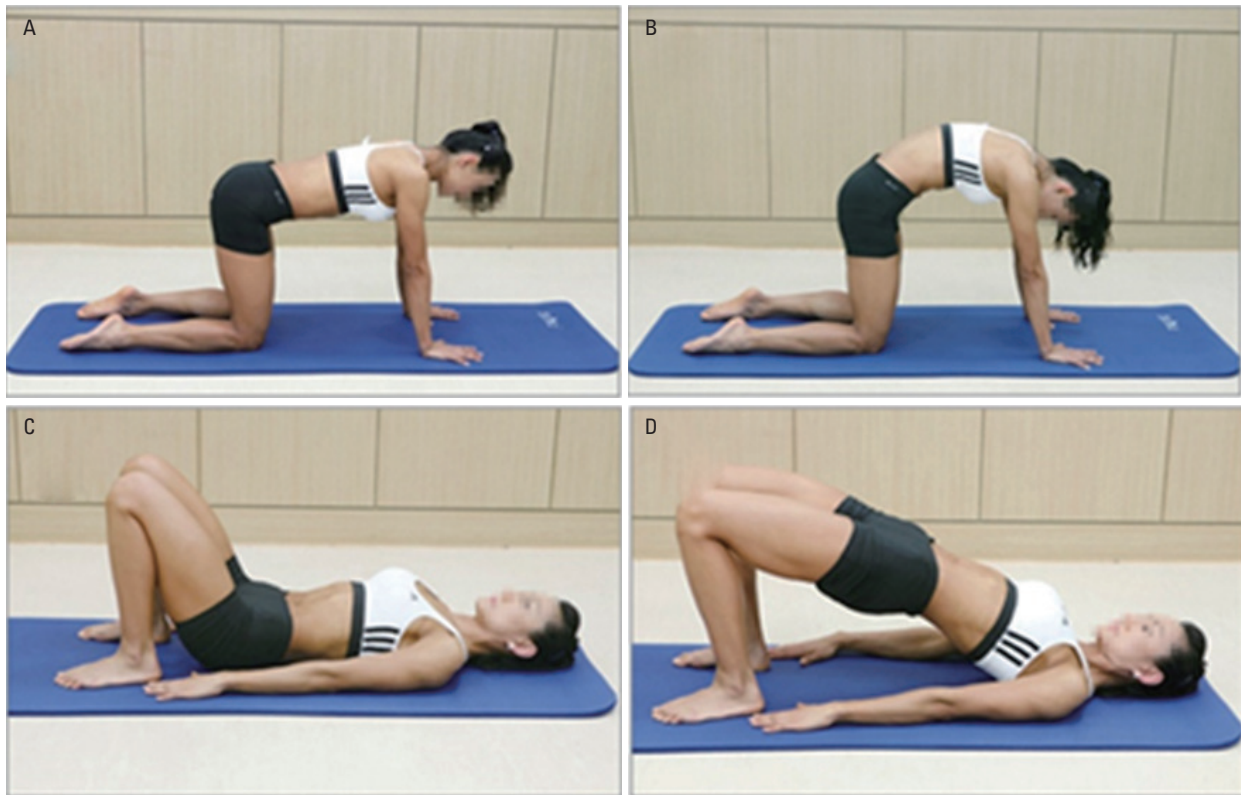
Last, find an expert before being swamped with negative information on diseases which does not necessarily help in treatment of patients.

## TREATMENT OF PELVIC PAIN IN PBS: THE MEDICATION HAS LIMITED EFFECTS ON PELVIC PAIN OR OTHER URINARY SYMPTOMS

Despite the emergence of modern medicine, positive outcomes to either cure or alleviate the symptoms are still dubious, with some particularly dire side effects or unabated discomfort. While weighing between those side effects and expedient medication interventions, like tamsulosin (Tamsulosin HCL, alpha1α1-adrenoceptor antagonists) or elmiron (sodium pentosan polysulfate), and NSAID, and pain killer, doctors could be esoteric with regard to whether or not to continue the medication, or patients themselves could decide not to take medications without consulting beforehand (Parsons et al., 1994). The medication has neither conquered pelvic pain nor other urinary symptoms ultimately, but along with some physical therapy, beleaguered patients have shown great progress in managing their pain (Chaiken et al., 1993).

## TREATMENT OF PELVIC PAIN IN PBS: PHYSICAL THERAPY

There are reports emphasizing the importance of breathing and meditation prior to therapy (Nickel et al., 2010). The deep breathing engages with the core muscle and learning how to hold the core will strengthen it. Consecutively, meditation to overcome mental fatigue resulting from PBS may reduce urinary frequency and urgency as well (Carrico et al., 2008; Webster and Brennan, 1998). Some urologists consider anxiety and stress as the main cause of PBS and other pelvic (van de Merwe et al., 2008; Warren, 2014). When there is unprecedented stress, the toxins that form



**Fig. 1.** Vinyasa yoga (Sun Salutation) is efficacious and therapeutic remedy. Yoga is the best exercise for healing pelvic pain and other symptoms. (A, B) Cat Stretching pose relieves lower abdominal pain. (C, D) Hip Lift pose strengthens the hip muscle while learning to control holding the core muscle.

contribute to the discomfort and dysfunction of bladder and urinary problems. In modern times, people practice yoga to learn how to breathe, to meditate, and to relax the muscles. Yoga is the best exercise for healing pelvic pain and other symptoms. Vinyasa yoga (Sun Salutation) appears to be the most efficacious and therapeutic remedy, and there are others that patients can easily follow at home (Uebelacker et al., 2010). The Cat Stretching pose in yoga relieves lower abdominal pain, and the Hip Lift pose strengthens the hip muscle while learning to control holding the core muscle (Fig. 1). Hatha yoga, an ancient type of physical and mental exercise, is also a useful modality for releasing the pain with interstitial cystitis (Ripoll and Mahowald, 2002). These physical therapies might alleviate the pain of PBS.

## TREATMENT OF PELVIC PAIN IN PBS: FOOD THERAPY

There is a phrase 'You are what you eat'. Indeed, the importance of a balanced diet and its consequences to health has become common knowledge. These days, people are armed with diet informa-

tion pouring from media, books, magazines, and the Internet. It is undoubtedly a positive phenomenon that people are now aware and in charge of their own health care. However as much as the word 'superfoods', like berries and tomatoes, has become popular (as if we can live just by consuming them), are we apprehensive about the fact that some foods, largely known as having 'health benefits', can trigger and worsen PBS symptoms? Some studies provide a list of foods to avoid worsening and herbs and supplements to consume, and there are quite a few surprises (Nickel et al., 2010). Patients must avoid alcohol, artificial sweets, carbonated drinks, coffee, and tea (Capodice et al., 2005; Chao et al., 2015). Surprisingly, patients must also avoid certain fruits, including citrus, berries, and pineapples, onions, soy sauce, spices, tomatoes, and vinegar. Foods with low glycemic index, such as beans, most whole grains, nuts, animal proteins, most vegetables, and legumes are suggested, while dairy is recommended for patients with chronic inflammation. A gluten-free diet would be beneficial to PBS patients with coeliac disease or noncoeliac gluten intolerance (Chao et al., 2015). The list of recommended herbs and supplements includes: bromelain, buchu, cornsilk, cranberry,

D-mannose, fennel seeds, glucosamine sulphate and chondroitin sulphate, gokshura, L-arginine, liquorice, lotus seeds, marshmallow root, preliel, pumpkin seeds, purnanava, quercitin, and sea buckthorn (Capodice et al., 2005; Carinci et al., 2013). Just one paragraph above, avoiding berries is recommended. The case for cranberry is that it is helpful for patients who have a tendency to develop urinary tract infections, but it can make the symptoms even more severe for those with PBS. Notice that making one's own cranberry juice is recommended due to the copious amounts of sugar in commercial juices. Coconut milk smoothies, cucumber milk, and cilantro smoothies are conducive to alleviating PBS symptoms (Chaiken et al., 1993; Parsons and Koprowski, 1991; Shorter et al., 2007).

## CONCLUSIONS

Appropriate diagnosis and treatment of pelvic pain in PBS is still very difficult because of the lack of definitive knowledge about its etiology, pathophysiology, and treatment modality. We present practical tips for easy diagnosis and proper treatment of pelvic pain in PBS. Physical and food therapies are alternative treatments for pelvic pain in PBS therapy, instead of medical treatment. Fundamentally, we advise that both medical staff and patients be dedicated and committed for achievement of long-term healing.

## CONFLICT OF INTEREST

No potential conflict of interest relevant to this article was reported.

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