# Painful bladder: Case studies

*Greg Bailly, MD, FRCSC*

Associate Professor and Residency Program Director, Department of Urology, Dalhousie University, Halifax, NS

Cite as: *Can Urol Assoc J* 2013;7(9-10):S206-7. http://dx.doi.org/10.5489/cuaj.1628
Published online October 9, 2013.

## Abstract

As part of the program at the 3rd Annual Canadian Urology Forum (2013), participants engaged in interactive discussions of difficult cases throughout the event. The following is a summary of discussions pertaining to two cases illustrating the difficulties in diagnosis and management of bladder pain symptoms.

## Case 1

### An 18-year-old female with recurrent "urinary tract infection"/cystitis

The patient is an 18-year-old female, with a two-year history of "recurrent urinary tract infection" (UTI)/cystitis. She has had two positive cultures and 10 negative. Courses of antibiotics have provided some relief at times, but other times have had no effect.

She presents for an ongoing episode over the past two weeks in which she has been experiencing frequency (every 30-60 minutes during the day), a constant urge, voiding five times prior to falling asleep and waking three times each night. She experiences significant dysuria and suprapubic (SP) pain with bladder fullness. She has not experienced any episodes of incontinence. Although she describes this as a "flare," she has had similar but slightly less intense symptoms on a daily basis for the past two years. She is accompanied at this visit by her mother, who is demanding answers about what is wrong with her daughter.

She has been sexually active for the past two years and says that she finds sexual activity uncomfortable. She is a smoker (approximately two packs per week), but has no other chronic conditions or remarkable medical history.

Physical examination finds a tender SP region and anterior vaginal wall.

Urinalysis shows 1 to 3 red blood cells and 5 to 10 white blood cells per high-power field. Culture and sensitivity are negative.

## Discussion

The participants at the 2013 Urology Forum made several observations and recommendations with respect to the diagnosis and management of this patient. The opinions regarding appropriate investigations and interventions at this point were varied.

Smoking cessation was deemed to be of paramount importance, and should be a major focus of patient education initiatives. It was agreed that education in general (about painful bladder syndrome, how it is treated) is a critical component of care, particularly with such a young patient.

In a situation like this, much will depend on the patient's level of awareness and knowledge of their condition. Many patients will already have researched their condition on the Internet and have already tried conservative measures (e.g., avoiding irritants, dietary modification, exercise, stress reduction). Such patients may be ready to move on to other treatment options such as pelvic-floor physiotherapy, oral or intravesical therapy, or cystoscopy with hydrodistention (note that if the patient had not yet been sexually active, cystoscopy may be less appropriate). Other participants advocated further work-up with local cystoscopy and pelvic examination to investigate for potential causes of her pain and, if negative, to reassure the patient that the bladder is normal, at least in the anatomical aspect.

The discussion of treatment options in this session seemed to reflect the nature of the evidence available for interventions for painful bladder syndrome. There is no clear, compelling evidence that any therapy is superior to others. Among the participants, there were advocates of every different potential therapeutic approach to this patient, including hydrodistention, oral therapy, intravesical therapy or combinations of these approaches.

The possibility of an extended course of antibiotics (e.g., nitrofurantoin + pyridium for 2-3 weeks) therapy was also discussed as a means of ruling out an infectious etiology (given that her symptoms are episodic). Participants also felt that multimodality (addressing the LUTS, pain, emotional health, etc) management was recommended but is not always feasible given local resources.

## Case 2

### A 32-year-old woman with a seven-year history of severe suprapubic pain

This patient has a seven-year history of severe suprapubic pain, with urethral burning, and urinary frequency. She describes her pain as "achy, burny and gripping." Her daytime frequency is 14 to 18, with nocturia averaging four voids. She says she has constant urgency, hesitancy, slow flow, and experiences significant dyspareunia. Cultures have always been negative.

Before this referral, she had already been to see two different urologists and two different gynecologists. Her treatment history includes seven hydrodistentions, which have provided some benefit lasting anywhere from two weeks to three months.

She has failed courses of therapy with antimuscarinics, tricyclic antidepressants, pentosan polysulfate, intravesical lidocaine, and heparin therapy. She is currently using oxycodone as needed to manage her pain. She is highly distressed and frustrated about the inability to manage her symptoms.

Cystoscopy, which the patient has trouble tolerating due to pain, shows a small capacity (150 mL) and normal mucosa. Urodynamics show early sensation, maximum cystometric capacity of 90 mL, no detrusor overactivity, poor bladder contraction, slow flow and complete emptying.

### Discussion

The participants agreed that this is a very challenging case, for which there is no easy and standard answer. Prior to embarking on surgical intervention, it was agreed that all means of conservative management modalities be exhausted, in particular achieving better pain management. This patient might benefit from involvement by a pain specialist, physiotherapist and psychologist. It was, however, mentioned that there are substantial practical barriers to implementing this strategy, including access to therapists who are trained in this sub-specialty and cost.

This patient has not yet been offered a trial of sacral nerve stimulation or botulinum toxin injection. These would also be reasonable options to try at this point. Bladder augmentation is not advised given the significant vaginal and urethral pain, and potential self-catheterization may not be successful for that reason. Urinary diversion would be the absolute last option and is not recommended at this point in time.

**Competing interests:** This article is part of a CUAJ supplement sponsored by Astellas Pharma Canada, Inc. Dr. Bailly has received speaker fees, educational grants, and/or travel assistance from Allergan, Astellas, Eli Lilly, and Pfizer.

**Correspondence:** Dr. Greg Bailly, 620-5991 Spring Garden Rd, Halifax, NS B3H 1Y4; gbailly@dal.ca