Add Cystoscopy to Incontinence Vaginal Surgery

BY SHARON WORCESTER

ST. LOUIS – Performance of routine cystoscopy in vaginal surgery for incontinence is useful to detect sutures and mesh going into the bladder, and to facilitate their removal, thus preventing morbidity from vesico-vaginal fistula, as well as ensuring that the ureters aren’t injured.

This was the message delivered by Dr. Peter M. Lotze of the University of Texas and Baylor College of Medicine, Houston. He showed an example of a Burch that was left in the bladder during urethroplasty. Had the suture been identified peroperatively, it could have been easily removed, but because it was identified at a later time, operative cystoscopy was required for removal of the stitch, he explained.

During a video demonstration of cystoscopy at the conference, which was sponsored by the Society of Pelvic Reconstructive Surgeons, he reviewed a video of a number of tips and techniques for improving surgery outcomes using cystoscopy and cystourethroscopy.

For example, examination of the bladder is best accomplished using either a 30-degree or 70-degree rigid cystoscope, both of which offer the necessary angles to examine the bladder in its entirety, the urologist said.

A 0- or 15-degree cystoscope is best for examining the circumferential nature of the urethra. Switching between scopes with different angles may be necessary to examine both the bladder and urethra,
The administration of IV dye such as indigo carmine dye should be used only after the surgical procedure is complete to provide clearer confirmation that the ureters are patent, compared with the preoperative images taken before or during the procedure.

Changning the light cords regularly is imperative, as these are frequently damaged, causing impaired visualization.

A Burch suture left in the bladder during urethroplasty could have been easily removed had it been identified peroperatively. Instead, operative cystoscopy was required.

In his demonstration of a cystoscopic bladder survey, he recommended beginning at the base of the bladder, moving along the mid-hemigland line and then up to the bladder dome, paying careful attention to stay within a few centimeters of the surface of the bladder to allow for adequate assessment. When assessing multiple angles, the bladder survey is completed by beginning at the 3 o’clock position and moving to the 9 o’clock position. The trigon should then be examined. It is at this point that ureteral patency can be evaluated if indicated.

The procedure is completed with an examination of the proximal, middle, and distal thirds of the urethra within the bladder. Consider a bladder biopsy if the cause of this pathology is unknown.

A lesion growing from the wall of the bladder. This should be biopsied, as it likely represents a carcinoma.

A grape-like cluster of cells. This typically represents a transitional cell carcinoma and should be biopsied and treated.

Squamous metaplasia. This benign overgrowth of cells that make up the trigone may include clear cysts, known as cystitis cystica. Floating particles in the cystoscopy field, which are referred to as exudate, are the result of a squamous metaplasia detaching from the trigone.

Lesions on the hemitrigone and bladder dome areas. These may include plaques (typically associated with bladder infection) or opaque cysts, known as cystitis glandularis (which may be associated with recurrent bladder infections). If the cause of these cysts is unknown, a biopsy is warranted.

A hypertrophied detrusor muscle within the bladder. This finding, known as a trabeculation, is common in patients with overactive bladder and also can be seen in patients with outlet obstruction.

An inflammatory reaction in the bladder neck or proximal urethra. These “pseudo-polyps” or “fronds” are an inflammatory response to a recent bladder infection, and represent a benign condition.

Sluggish flow of urine on ureteral examination. This could be normal, but could be a sign of partial obstruction from the current surgery or a past surgery, a kidney stone, or a possible stricture in the ureter. Postoperative swelling neighboring the ureter could cause obstruction, and a work-up is warranted if this is suspected.

Dr. Lotze disclosed that he is a speaker for Boston Scientific, and has conducted research for the company.

For office cystoscopy during which the patient is awake, consider the use of a flexible cystoscope to enhance patient comfort.

If the view of the bladder wall is obscured, it may be due to blood, mucous, or intra- venous dye could be the cause; filling, emptying, and redefining the bladder as needed will allow a clearer view of the urothelium. From a surgical standpoint, insufficient blood loss in the presence has been attributed to idiosyncratic reactions to indigo carmine dye.

A large, randomized, double-blind, placebo-controlled, pivotal effort of effect therapy targeting bladder pain syndrome/interstitial cystitis (BPS/IC) has been conducted in patients with BPS/IC.

A new, severe pain onset is more likely associated with a lower urinary tract infection (UTI) or a bladder stone.

In the Willowbrook phase 3 study in patients with BPS/IC, there was no difference in the number of days from the onset of symptoms to the patient’s first visit with the doctor. Since both BPS/IC studies were conducted in women 65 to 79 years of age, it is unclear whether these findings are applicable to men, as men typically are seen for complaints of voiding symptoms at or before the age of 40 years.

A biopsy should be performed if the cause of the symptoms is unknown, and a work-up is warranted if this is suspected.

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