

Research Article

A “Scrotal Cystocele”

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Case

Participation of the urinary bladder is said to occur in 1-3% of inguinal hernias, especially in males older than 50 years of age [1,2]. In 1951, Levin coined the term “Scrotal cystocele” for massive bladder herniation descending into the scrotum (Figure 1) [1]. While scrotal cystoceles are uncommon, awareness of their presence is imperative, as bladder injury during herniorrhaphy can lead to infection, sepsis, or even death [2,3]. To avoid these complications, it has been suggested that all men older than 50 years of age, who have prostatism associated with an inguinal or femoral hernia, undergo appropriate imaging studies to exclude bladder herniation prior to surgical repair [2,4].

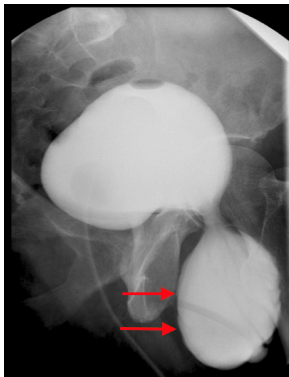


Figure 1: Retrograde cystography image shows a dumbbell-shaped bladder configuration with a large component herniating into the scrotum (red arrows), a “Scrotal cystocele”.

The etiology of a scrotal cystocele is multifactorial. Bladder outlet obstruction causing chronic bladder distention and contact of the bladder wall with the hernia opening, loss of bladder tone with weakness of supporting structures, pericystitis and perivesical bladder fat protrusion, obesity, and the presence of space-occupying pelvic masses have all been implicated [2]. The majority of the bladder hernias are asymptomatic, but symptoms may include dysuria, frequency, urgency and nocturia. Specific symptoms, such as reduction in size of the hernia mass after micturition and “Two-stage” micturition, a situation in which initially the patient empties the normally located bladder, and then the patient voids again after manual compression of the bladder within the hernia, may also occur [3,5].

Retrograde cystography is usually considered the best technique to image a scrotal cystocele with patient positioning a critical factor, as the herniated portion of the bladder may be seen only on an erect view [2]. Other imaging modalities like excretory urography, ultrasound, CT and MRI can be helpful. The high resolution and image reconstruction capability provided by CT (Figures 2A,2B) and MRI also allows for confident diagnosis and classification of the hernia as direct or indirect according to its position (medial or lateral) in relation to the vascular landmarks.

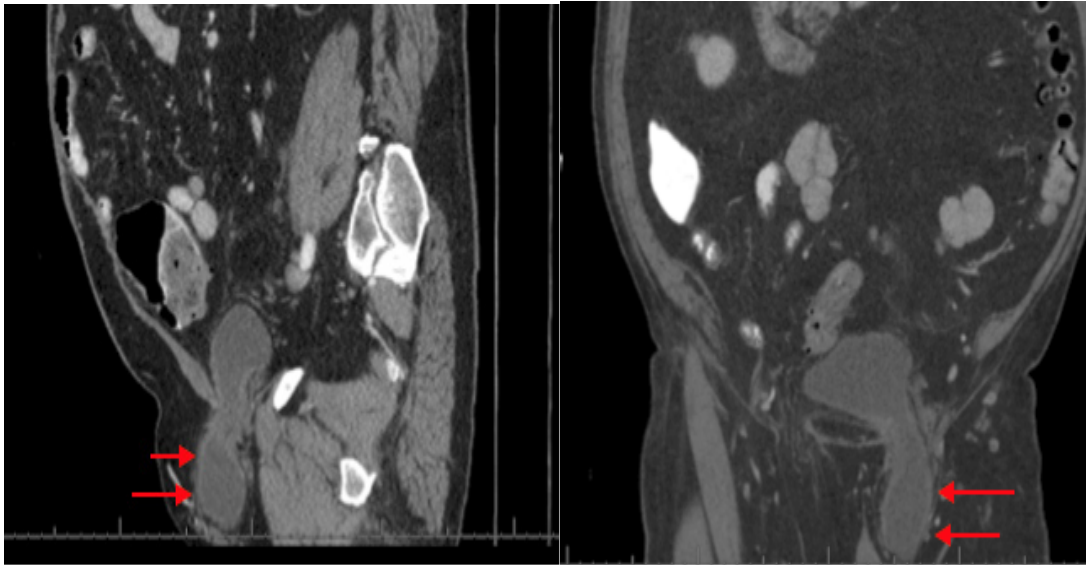


Figure 2: Sagittal (A) and coronal (B) reformatted CT images from the same patient demonstrates a large portion of the urinary bladder herniating into the left scrotum via the inguinal canal (red arrows).

References

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