

Bladder Hernia; A Case Report

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ABSTRACT

Bladder herniation is a rare condition usually diagnosed peroperatively. Patients may present with inguino-scrotal swelling, painful micturition, hematuria, or urgency. Obesity, poor musculature, and advancing age are risk factors. We hereby present a case of bladder herniation in a 47-year-old obese male presented to the outpatient department with a history of inguino-scrotal, partially reducible swelling, lower urinary tract symptoms, off and on haematuria, and painful micturition. Scrotal ultrasound showed clear fluid present in the scrotum which was communicating with the bladder. This was confirmed by cystography showing a "dog ear" sign. Hernioplasty was performed after the hernia containing the bladder was reduced.

Keywords: bladder hernia, inguinal hernia, lower urinary tract symptoms.

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Introduction

Inguinal bladder hernia, first reported by Levine in 1951. It is a rare condition inspite of close association of the bladder to the inguinal canal.¹ Its incidence is 1–4% of all inguinal hernias. Obese males, advancing age and poor musculature have more risk for this pathology. Most of these cases (93%) are diagnosed during surgery.²

Inguinal bladder hernia diagnosis might be tough and complicated. Patients may have symptoms of inguino-scrotal swelling, hematuria or painful & difficult micturition, Some patients may present with 2-stage urination to complete bladder emptying and in some patients manual compression of the scrotum may be required to empty the bladder completely.³ Repeated urinary tract infections, obstructive uropathies, or vesical stones formations are rare complications

Surgical repair of the hernia after reducing the bladder and placing it into a normal anatomical position is the standard treatment.³ Suspicion of bladder herniation and its confirmation by ultrasonography, cystography, and CT prior to surgery can be advantageous in planning for a surgical approach and lesser chances of complications. Catheterization is recommended before surgery to minimize complications.

Here in, we present a case of a 47-year-old obese man with left sided bladder herniation presented with

inguinoscrotal swelling and lower urinary tract symptoms.

Case Report

A 47-year-old male presented to outpatient department with a history of inguino-scrotal, partially reducible swelling (on lying posture), lower urinary tract symptoms, off and on hematuria and dysuria. He was an obese person with body mass index of 33. He was nonsmoker, and no other past medical history.

Physical examination revealed large inguinoscrotal swelling, non tender and partially reducible with a sound of water movement on compression. (Figure I)



Figure I. Inguinoscrotal swelling containing bladder.

Ultrasound of the kidney, ureter and bladder was unremarkable. Scrotal ultrasound showed clear fluid present in the scrotum which was communicating with bladder. This was confirmed by cystography showing "dog ear" sign. (Figure II)



Figure II. Dog-ear appearance on cystography.

He was operated on an elective list. Hernioplasty was performed after the hernia containing the bladder was reduced. (Figure III)



Figure III. Hernia containing urinary bladder

The patient had no per-operative complications, and the post-operative period was eventless. The Foley catheter was removed after two weeks, and the patient was voiding normally without any complaint.

Discussion

An inguinal bladder herniation occurs due to pulling of the bladder and a sheath of peritoneum that forms its sac. These are forced through the abdominal fascia's weak spot.³ Inguinal bladder hernias can arise for a variety of reasons. These include lax pelvic muscles,

obesity, obstruction of the bladder outflow, male gender, and advanced age.⁴ Rare reports of patients presenting with a massive bladder herniation that caused to bilateral hydronephrosis and abrupt renal failure have been documented in the literature.⁵

A detailed and careful evaluation of the patient may be suggestive of a preliminary diagnosis. Ultrasonography, cystography, and CT is usually employed to confirm the diagnosis.⁶ Cystoscopy should be used to rule out any additional pathological lesion in the bladder. Voiding cystography showing a "dumbbell" or "dog-ear" shape of the bladder is the most confirmatory investigation for the diagnosis of bladder hernia. We recommend micturating cystography in suspected cases of bladder herniation.⁷

Standard management of bladder hernia includes bladder reduction or rarely partial resection of bladder and hernioplasty. Resection of bladder wall is usually done in cases with wall necrosis, a tight hernia neck, or growth in the herniated portion of bladder.

We used normal saline to distend and better visualize the bladder. Open reduction of the bladder and hernioplasty was performed. Post-operative recovery was uneventful.

Conclusion

A high level of clinical suspicion is needed to diagnose inguinal bladder hernias, and preoperative detection is essential for avoiding surgical complications such bladder injury.

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