ORIGINAL RESEARCH PAPER
Volume - 12 | Issue - 02 | February - 2023 | PRINT ISSN No. 2277 - 8179 | DOI : 10.36106/ijsr
INTERNATIONAL JOURNAL OF SCIENTIFIC RESEARCH

PANTALOON HERNIA CONTAINING URINARY BLADDER –RARE CASE REPORT

Surgery

Dr. Anoop Kumar Singh Assistant Professor, Department Of General Surgery, Rani Durgavati Medical College Banda.

ABSTRACT

Although inguinal hernias are common, inguinal herniation of the urinary bladder wall is rare. The complete migration of the urinary bladder into the scrotum is considered less frequent and majority of patients with bladder hernias are asymptomatic and diagnosis is made intraoperatively; however, difficulties in urination may lead to the correct diagnosis. We report about a case of a large left-sided scrotal hernia with complete bladder herniation presenting without urological symptoms.

KEYWORDS

bladder herniation, inguinal hernia, case report

INTRODUCTION

Inguinal bladder hernia, first described in the literature by Levine in 1951, is a rare condition despite the proximity of the bladder to the inguinal canal [1]. Bladder herniation is present in 1–4% of all inguinal hernias, though incidence may be as high as 10% in obese men over the age of 50 [2]. Risk factors include male gender, advanced age, chronic urinary obstruction, weak pelvic musculature and obesity [3]. Significantly, only 7% of inguinal bladder hernias are diagnosed prior to surgery, with the vast majority being diagnosed intraoperatively and 16% diagnosed postoperatively due to complications including bladder injury and leakage [4].

Diagnosis of inguinal bladder hernia may be challenging because the majority of patients are asymptomatic, in which case preoperative diagnosis depends on incidental discovery on radiography [5]. Patients that are symptomatic most often present with nonspecific symptoms such as inguinal swelling, dysuria, hematuria, and urinary urgency [6,7]. In advanced cases, patients must complete 2-stage urination in which they manually compress the scrotum after voiding for bladder emptying [5]. Severe urologic complications include urinary tract infections, obstructive uropathy, and even bladder infarctions that require subtotal cystectomy [5,8]. Associated pathologies include benign prostatic hyperplasia, hydronephrosis, vesicouretertic reflux, and scrotal abscesses [3].

Surgical repair of the hernia after bladder reduction is currently the standard treatment, and consists of intraoperative reduction or less commonly resection of bladder followed by herniorrhaphy [9]. If the diagnosis is known, catheterization is recommended prior to surgery [10,11]. Prompt recognition of inguinal bladder herniation and appropriate imaging prior to surgery can aid in planning for a modified surgical approach and lessen postoperative complications.

CASE PRESENTATION

A 55-year-old man with known right-sided inguinal hernia presented to the opd department due to left-sided groin swelling. There was no abdominal pain. There was no history of nausea or vomiting. There were no urinary symptoms. He had no medications and no known allergies. Laboratory values showed no signs of infection and normal renal function.

On clinical examination, a large left-sided inguinoscrotal inguinal hernia were found. His abdomen was otherwise soft, without pain on palpation.

The patient was taken to the operating theater for hernia repair. Intraoperative findings revealed a huge direct left inguinoscrotal hernia with complete herniation of the bladder into the scrotum along with indirect sac. The bladder appeared normal, with no signs of injury and could be repositioned to its normal anatomical position. The hernia was repaired with a mesh by the Lichtenstein technique.

The patient recovered postoperatively without complications. He was discharged from the hospital 5 days after the operation with foley's in situ.

DISCUSSION

We report about a case of a large left-sided scrotal hernia with complete bladder herniation presenting without urological complications. Inguinal bladder hernia was first described by (Levine in 1951) as a scrotal cystocele, which is a rare clinical finding. This condition has been reported in literature, primarily in the form of case reports and case series. Inguinal bladder hernias mostly occur in patients beyond the fifth decade . Weakening of the bladder tone and supporting structures has been hypothesized to contribute to bladder herniation. Conditions like bladder-outlet obstruction (benign prostate hyperplasia, bladder neck strictures), direct inguinal hernia, male gender, obesity and weakened abdominopelvic wall are the most known etiopathological factors. In the context of bladder hernias, obstructive renal failure due to ureteric involvement is also a rare finding. The typical symptom of two-stage micturition (double micturition: manual compression of the scrotal swelling to void) is pathognomonic.

A correct preoperative diagnosis may be helpful to avoid iatrogenic bladder injury. CT scan should be recommended for patients with inguinoscrotal hernia associated with urinary disorders (Mery' s sign) [11].

The standard treatment of inguinal bladder hernias is the surgical repair with a mesh to prevent recurrence.

Inguinal hernias with complete urinary bladder herniation are rare. They are often difficult to diagnose and remain a surgical challenge. Preoperative imaging is essential to prevent iatrogenic injury. An open surgical repair with mesh by the Lichtenstein technique is the standard management. Partial resection of the herniated bladder is only recommended, if there is evidence of bladder wall necrosis or bladder diverticuli.

REFERENCES

1- B. Levine **Scrotal cystocele** JAMA, 147 (15) (1951), pp. 1439-1441, 10.1001/jama.1951.73670320003013a
2- A. Hamidi Madani, H. Mohammadi Nikouei, H. Baghani Aval, A. Enshaei, A. Asadollahzade, S. Esmaeili **Scrotal herniation of bladder: a case report** Iran. J. Med. Sci., 38 (1) (2013), pp. 62-64
3- A. Habib **A rare case of inguinal hernia with complete bladder herniation** Case Rep. Surg., 2017 (2017), 10.1155/2017/4658169
4- K. Khan, A. Chaudhry, M.B. Feinman **Inguinoscrotal hernia containing the urinary bladder** BMJ Case Rep., 2016 (2016), 10.1136/bcr-2016-217408
5- K.H. Kraft, S. Sweeney, A.S. Fink, C.W.M. Ritenour, M.M. Issa **Inguinoscrotal bladder hernias: report of a series and review of the literature** Can. Urol. Assoc. J., 2 (6) (2008), pp. 619-623
6- S. Çalışkan, M. Türkmen, M. Sungur **Inguinal bladder hernia in female patient** Iran. J. Med. Sci., 43 (6) (2018), pp. 671-672
7- A.A. Wagner, P. Arcand, M.H. Bamberger **Acute renal failure resulting from huge inguinal bladder hernia** Urology, 64 (1) (2004), pp. 156-157,

10.1016/j.urology.2004.03.040
8- P.C. Fisher, B.K. Hollenbeck, J.S. Montgomery, W. Underwood **Inguinal bladder hernia masking bowel ischemia** Urology, 63 (1) (2004), pp. 175-176, 10.1016/j.urology.2003.09.013
9- M. Ugur, N. Atcı, C. Oruc, S. Akkucuk, A. Aydogan **Left inguinal bladder hernia that causes dilatation in the ureter** Arch. Iran. Med., 19 (5) (2016), pp. 376-378 doi:0161905/AIM.0013 PMID:27179171
10- M. Taskovska, J. Janež **Inguinal hernia containing urinary bladder—a case report** Int. J. Surg. Case Rep., 40 (2017), pp. 36-38, 10.1016/j.ijscr.2017.08.046
11- Papatheofani, V., Beaumont, K., & Nuessler, N. C. (2020). Inguinal hernia with complete urinary bladder herniation: a case report and review of the literature. *Journal of surgical case reports*, *2020*(1), rjz321. https://doi.org/10.1093/jscr/rjz321
12- Badji N, Deme H, Akpo G, Toure M, Ndong B, Niang E. Diagnostic scanographique d' Une hernie inguino- scrotale de la vessile a propos d' un cas. *Pan African Medical Journal* 2016;25:126.