

Inguinal-Scrotal Bladder Hernia and Strangulated Hail in an Observation and Review of the Literature

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Abstract

Massive scrotal hernias of the bladder are rare. The authors report a rare case of inguino-scrotal hernia with intestinal and bladder contents in a 75-year-old patient admitted to emergency for abdominal bloating with stopping of materials and gases associated. This table would evolve for 7 days. He underwent an emergency intervention that revealed herniation of the bladder and small intestine that were necrotic. The patient was admitted to the intensive care unit where he died on postoperative day 2 in an array of severe sepsis and profound deterioration of the general condition.

Keywords: Inguino-scrotal hernia, Strangulated, Bladder, Partial cystectomy

Introduction

Massive scrotal hernias of the bladder are rare. It results both from weakness of the abdominal wall and elevation of intra-abdominal pressure, prostatic obstruction being most often involved in the elderly [1]. His diagnosis is most often intraoperative, sometimes even postoperative when complications appear. We report the observation of a patient with strangulated inguino-scrotal hernia of the bladder and hail of intraoperative discovery.

Observation

A 75-year-old patient received in the emergency department for abdominal bloating with stopping of materials and gases that had been evolving for 7 days. The patient was known to be hypertensive on treatment and also had low urinary tract symptoms with mild dysuria and mixed pollakiuria with 5 lifts per night. The clinical examination revealed a patient in fairly good general condition, a distended and tympanic abdomen, an irreducible and painful inguino-scrotal left hernia. In the rectal examination, the prostate was slightly increased in adenomatous volume. The radiography of the abdomen without preparation had objectified the presence of hydro-aeric levels of grelic type. The diagnosis of intestinal obstruction on hernia strangulation was made thus requiring emergency surgical exploration. In the course of the operation, an oblique left kelotomy was performed and revealed a herniation of the bladder and small intestine that were necrotic (Figure 1). Intestinal resection followed by end-to-end anastomosis and resection of the necrotic part of the bladder with cystorraphy were performed. The whole was reintegrated in the abdominal cavity before proceeding to the cure of the hernia according to the technique of Bassini. The patient was admitted to the intensive care unit where he died on postoperative day 2 in an array of severe sepsis and profound deterioration of the general condition.

Discussion

The hernia of the bladder is a rare condition, it is found in only 1 to 4% [2-3] of inguinal hernias. The total migration of the bladder in extra abdominal with strangulation is even more exceptional. The inguinal hernia of the bladder is often fortuitous discovery intraoperatively as it was our case. Sarr A. and al. [4] found bladder hernia intraoperatively in 75% of cases, due to accidental opening of the bladder. Watson et al reported 80.4% intraoperative finding on a series of 347 bladder hernias [5]. A discovery postoperatively following the occurrence of a complication such as hematuria, suture release, fistula [6-7] was also found. The hernia of the bladder often

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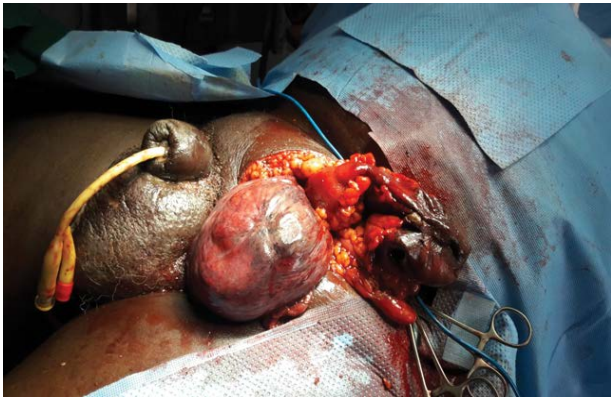


Figure 1: Hernia of bladder and small bowel with intestinal necrosis

affects the elderly subject. Sarr A. and al. [4] found patients with an average age of 57.5 years. According to Frenkel [7], bladder hernia occurs primarily in men over 50 years of age.

It can be caused by a sudden increase in intra-abdominal pressure [8], which is the case in our patient who presented distention of the abdomen related to the occlusive syndrome. According to Karatzas [9], the predisposing factors for an inguinal bladder hernia are obesity, the weak musculature of the abdominal wall and especially the bladder obstacle.

The inguinal hernia of the bladder is most often asymptomatic. The total migration of the bladder, however, has a noisy urinary symptomatology, made of irritative urinary signs, and especially urination in several times as was the case for our patient [10].

The diagnosis of inguinal bladder hernia should be considered in the presence of irritative and / or obstructive urinary tract symptoms in a patient with inguinal hernia [10].

According to some studies, inguino-scrotal bladder hernia is associated with benign urological pathology in 23.5% of cases (benign prostatic hypertrophy) [11]. The preoperative diagnosis of bladder inguinal hernia is delicate; it is performed in less than 7% of cases [10]. Intravenous urography, retrograde urethrocytography or pelvic CT reveal intrahepatic bladder [10]. Strangulation of an inguinal hernia of the bladder is rare. The most

common complications are related to urinary stasis including urinary tract infection, the occurrence of bladder stones [11].

In our patient the constriction could be caused by incarceration in the bag of the bladder and bowel at the same time making the neck very narrow

Our case is similar to that of Frenkel [7] who found in his patient, a specific urological history that he had neglected thinking about a strangulated hernia of the intestine or epiploon before the intervention.

Conclusion

The diagnosis of bladder hernia could be evoked before throttling in the presence of irritating and / or obstructive urinary signs and the presence of inguinal hernia.

References

1. Jihad El Anzaoui, Y. El Harrech, N. Abbaka, et al. Hernie inguinale ou vésicale ? *Can Urol Assoc J.* 2013;7(12):837-839.
2. Pasquale MD, Shabahang M, Evans SRT. Obstructive uropathy secondary to massive inguinoscrotal bladder herniation. *J Urol.* 1993;150:1906-1908
3. Schewe J, Brands FH, Pannek J. The inguinal bladder diverticulum: A rare differential diagnosis of hernias. *Int Urol Nephrol.* 2000;32(2):255-256.
4. A Sarr, Ondo CZ, Sow Y, et al. Hernie inguinale de la vessie: à propos de 8 cas. *Pan Afr Med J.* 2015;22 (7):74-76.
5. Vindlacheruvu RR, Zayyan K, Burgess NA, Wharton SB, Dunn DC. Extensive bladder infarction in a strangulated inguinal hernia. *Br J Urol.* 1996;77(6):926-927.
6. Catalano O. US evaluation of inguinoscrotal bladder hernia: Report of three cases. *Clin Imaging.* 1997;21(20):126-128.
7. Frenkel A, Roy-Shapira A, Shelef I, et al. "Inguinal herniation of the urinary bladder presenting as recurrent urinary retention," *Case Reports in Surgery.* 2015;3:1-3.
8. Karatzas A, Christodoulidis G, Spyridakis M, Stavaras C, Aravantinos E, Melekos M. A giant inguinoscrotal bladder hernia as a cause of chronic renal failure: a rare case. *Int J Surg Case Rep.* 2013;4(3):345-347.
9. M. El Alaoui, M Hamid, Y Bakali, A Hrrora, M Ahallat. Hernie de la vessie en inguino-scrotal. *Maroc Médical.* 2012;34(2):18-20.
10. Oruç MT, Akbulut Z, Özozan Ö, Coskun F. Urological finding in inguinal hernias: A case report and review of the literature. *Hernia.* 2004;8(1):76-79.
11. Ptochos A, Isofidis N. Lithiasic inguinoscrotal herniation of the bladder secondary to prostate enlargement. *Acta Radiol.* 2002;43(5):543-544.