

An Unusual Case Of Scrotal Cystocele In Inguino Scrotal Hernia

Dr. Jameel Akhter, Dr. Sivaranjani Sivakumar*, Dr.Surabhi Sreekumar
Department Of General Surgery, Apollo Main Hospital, Chennai, Tamilnadu, India

***Corresponding Author:**

Dr. Sivaranjani Sivakumar

Department Of General Surgery, Apollo Main Hospital, Chennai, Tamilnadu, India

Type of Publication: Case Report

Conflicts of Interest: Nil

Abstract

Inguinal hernia is one of the commonest conditions that occurs in men with an incidence of 3-8 % of total population. In inguinal hernia, part of the urinary bladder can be present as content which would be considered as sliding hernia, but majority of the urinary bladder wall can be expected to present in the hernial sac, in that case it is termed as scrotal cystocele. Hereby, we present a case of 72 year old male diagnosed to have right inguinal hernia with urinary bladder as content and he was managed by open right inguinal hernia mesh repair .

Keywords: Scrotal cystocele, urinary bladder, cystourethrogram, hernia repair

Introduction

Scrotal cystocele was first defined by Dr.Levine in 1951 as the herniation of urinary bladder into the scrotum[1]. Age may vary but it is common in males more than 50 years of age. Common presentation will be scrotal swelling with urinary complaints. It needs to be evaluated by terms of radiological imaging. Once the diagnosis is made, it must be operated as soon as possible with careful dissection to avoid iatrogenic injury to the urinary bladder.

Case Report:

A 72 year old male with no known comorbidities who had undergone TURP (Trans urethral resection of prostate) 2 years ago for benign prostatic hyperplasia presented to the OP with complaints of right scrotal swelling associated with on and off pain which was not increasing in size. He also had difficulty in micturition and hematuria. An irreducible, non tender, right direct inguino- scrotal hernia was noted on clinical examination. We planned for right inguinal hernia repair. Before proceeding onto the surgery, he was evaluated thoroughly. Ultrasound abdomen was done which showed 4.7cm defect in the right inguinal region with omentum and right anterolateral wall of urinary

bladder as herniating content. No defect was seen on the left inguinal region. Urologist opinion was sought for the urinary complaints.

Micturating cystourethrogram was performed by filling urinary bladder with diluted iodinated contrast and it revealed right scrotal cystocele with significant post void residue in herniated urinary bladder.

Cystoscopy and open right inguinal hernia mesh repair were undertaken at the same sitting under spinal anaesthesia. First, cystoscopy was performed. The intra op findings were wide open bladder neck and the bladder mucosa was normal. Following cystoscopy, we proceeded with open right inguinal hernia tension free lichenstein mesh repair. Intraoperatively, we encountered the urinary bladder in the right scrotum. Urinary bladder was reduced back without opening the sac through the defect without any injury. Posterior wall strengthening was also done. Postoperative period was uneventful. Foleys catheter was retained for 3 days. On postoperative day 3, we removed the foleys catheter, following which patient did not experienced any urinary symptoms. On follow up patient was found to be in stable condition and recovered well.

Figure 1: Ultrasound abdomen showing right inguinal defect



Figure 2: Micturating cystourethrogram showing incomplete emptying of bladder and scrotal cystocele



Figure 3: Intra-op image of urinary bladder in the right inguinal hernia



Discussion:

Scrotal cystocele is called when the urinary bladder present as content of the inguinal hernia more of a large sliding hernia with an incidence of 1-4%[2]. Large scrotal hernias with urinary bladder is very less common <1%. It is classified into three types – intraperitoneal, para peritoneal and extra peritoneal, based on the relation to the peritoneum. Old age, protrusion of perivesical fat, obstruction of urinary tract, chronic bladder distension, previous history of surgery, obesity, mass in the pelvis. It occurs due to the bladder wall weakness, increased abdominal pressure, diverticulum or tumor of bladder. Usually it is a asymptomatic condition, but sometimes patient with large cystocele presents with scrotal swelling, lower urinary tract symptoms like frequency, urgent micturition and nocturia, urinary tract infections, two stage micturition - patient compress the scrotum for voiding after micturition, which is a classical presentation[3]. Upon clinical examination, direct inguino scrotal hernia, mostly irreducible must be evidenced. Urinary bladder in the scrotum can be confirmed by injecting saline into the foley’s catheter, as it fills into the urinary bladder the size of the scrotum increases.

Cystourethrogram plays an important role in diagnosis and evaluation of scrotal cystocele[4]. It helps in preventing injury to the urinary bladder during hernia repair surgery. In addition to that,

ultrasound, CT scan, intravenous pyelography can also be done. Preoperative diagnosis of scrotal cystocele is essential. Only 7% cases can be identified preoperatively[5]. In our study we carried out micturating cystourethrogram revealing scrotal cystocele. Uroflowmetry gives additional information about the neurogenic bladder.

Complications of scrotal cystocele that can occur if no treatment is offered - bladder obstruction, bladder necrosis, infarction and perforation, haematuria, vesicoureteric reflux, hydronephrosis, renal failure.

Felipe Welter Langer et al. published a case report of incidentally detected massive scrotal cystocele on CT scan of abdomen and pelvis in an asymptomatic 65 year old male while evaluating for the staging of Non Hodgkins lymphoma[6]. They are suggesting that diagnosis of scrotal cystocele before surgery remains the most important determinant for a good outcome.

Conclusion:

Despite its rarity, any middle and old age male patients presenting with obstructing urinary symptoms, scrotal cystocele must be rule out. It requires thorough presurgical evaluation before planning for surgery. Inadvertent injury to the bladder can be avoided by reducing urinary bladder with intact sac.

Acknowledgements:

Authors would like to thank Department of urology, Department of radiology and Apollo main hospital.

References:

1. Levine B. Scrotal cystocele. *Journal of the American Medical Association*. 1951 Dec 8;147(15):1439-41.
2. Bisharat M, O'Donnell ME, Thompson T, MacKenzie N, Kirkpatrick D, Spence RA, Lee J. Complications of inguinoscrotal bladder hernias: a case series. *Hernia*. 2009 Feb;13(1):81-4.
3. Ray B, Darwish ME, Baker RJ, Clark SS. Massive inguinoscrotal bladder herniation. *The Journal of Urology*. 1977 Aug;118(2):330-1.
4. Bjurlin MA, Delaurentis DA, Jordan MD, Richter HM. Clinical and radiographic findings of a sliding inguinoscrotal hernia containing the urinary bladder. *Hernia*. 2010 Dec;14(6):635-8.
5. Kim KH, Kim MU, Jeong WJ, Lee YS, Kim KH, Park KK, Chung MS, Chung BH, Lee SH. Incidentally detected inguinoscrotal bladder hernia. *Korean Journal of Urology*. 2011 Jan 1;52(1):71-3.
6. Langer FW, Alves GR, Suertegaray G, Santos D, Haygert CJ. Incidentally detected massive scrotal cystocele. *Radiologia Brasileira*. 2018 Mar;51:129-30.