

Case Report

Right iliac fossa lump: a diagnostic surprise

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ABSTRACT

A 42 years gentleman presented with recurrent urinary tract infection and intermittent lump in the right side of abdomen for 4 months. Clinically, soft cystic lump in the right iliac fossa with ill-defined lower margins, and disappeared on micturition. Contrast enhanced CT urography showing a large urinary bladder diverticulum of 107mm×52 mm. Cystoscopy confirmed a bladder diverticulum on left lateral wall of urinary bladder, superolateral to left ureteral orifice with no bladder trabeculations and bilateral normal ureteric orifice. Patient underwent open diverticulectomy with primary repair of urinary bladder wall done. Histopathology confirmed the presence of all layers in the wall of diverticulum. Postoperative period was uneventful. Patient resolved of symptoms in the 6 month follow up period.

Keywords: Recurrent urinary tract infection, Congenital bladder diverticulum in adult, Diverticulectomy

INTRODUCTION

Herniations of urinary bladder mucosa in between fibres of the detrusor muscle presents as bladder diverticula. Congenital bladder diverticula are paraureteral in location. As Waldeyer's sheath closes the potential space between the intravesical ureter and bladder muscle in normal bladder.¹ Congenital diverticula arise due to defect in this sheath. Thus they are classically located at or around the ureteral hiatus in almost 90% of patients.² Bladder diverticula empty poorly during micturition, thus making it more prone for recurrent infections.³ Almost all diverticula are acquired as a result of bladder outlet obstruction. The congenital bladder diverticula accounts for only 1.7%.⁴ Most of them presents in first decade of life.⁵ Acquired bladder diverticula are due to secondary to bladder outlet obstruction, because of the high pressures generated in the bladder while passing urine. Congenital diverticula occurs due to congenital weakness in the wall of bladder even with normal vesical pressures.⁶ Urinary stasis leading to urinary tract infections is the most

common clinical presentation. Other presentations may include acute urinary retention, bladder stones, enuresis.⁷ when the diverticula enlarges and obstructs the bladder neck distally, it causes extrinsic bladder obstruction.⁸ Many of them are diagnosed in the workup of urinary tract infections in adults.⁹ Asymptomatic patients can be reassured and observed. Whenever the patient suffers from recurrent urinary tract infections, vesical calculus, complicated vesicoureteral reflux, voiding dysfunction, and urinary retention; surgical excision as diverticulectomy with or without ureteric reimplantation is advocated.¹⁰ Herein, we report a large true bladder diverticulum in an adult with recurrent urinary tract infection.

CASE REPORT

A 42 years gentleman presented with recurrent urinary tract infection and intermittent lump in the right side of abdomen which resolved on passing urine for 4 months. On abdominal examination, a lump of 8 cm×6 cm, non-

tender, soft, cystic in consistency, with ill-defined margins, lower border not defined, disappeared immediately after micturition. In figure 1 showing CECT urography, a large diverticulum of 107 mm×52 mm communicating with left superolateral aspect of urinary bladder through a neck of 13 mm in width, left ureter was displaced laterally, urinary bladder was well distended with thick walls. On cystoscopy, a large bladder diverticulum on left lateral wall of urinary bladder, superolateral to left ureteral orifice with no bladder trabeculations. Patient underwent open diverticulectomy under spinal anesthesia. Figure 2 shows intraoperative findings are the neck of diverticulum was found on the superolateral aspect of urinary bladder, with adhesions around the diverticulum, ureter displaced laterally downwards and not involved. On histopathology, presence of muscle bundles confirmed it as a true diverticulum. Postoperative period was uneventful. Patients symptoms improved on follow up visits for 6 months.

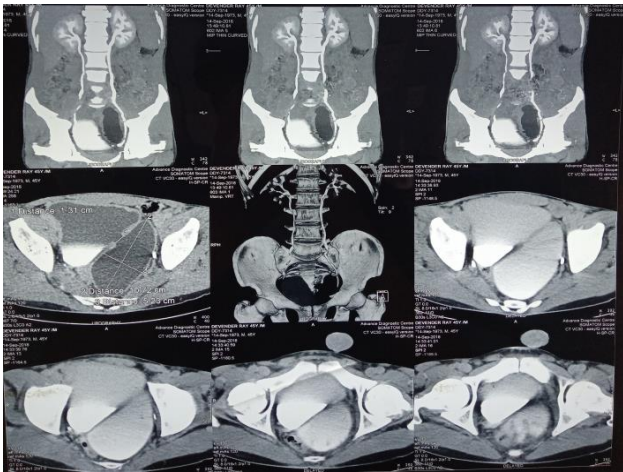


Figure 1: CECT urography showing congenital bladder diverticulum.

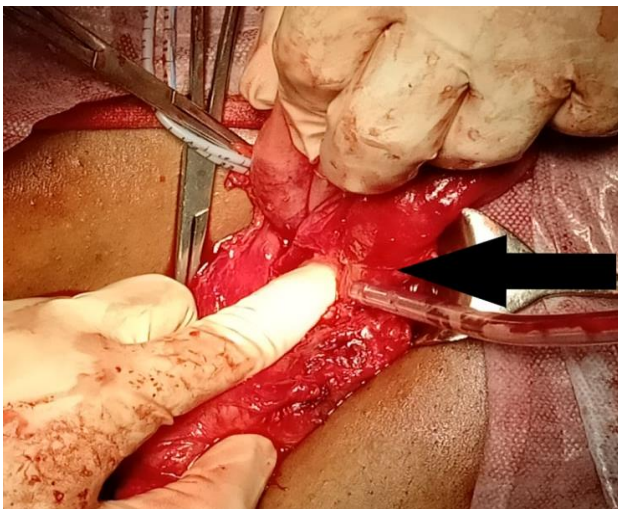


Figure 2: Intraoperative findings,(arrow pointing the neck of diverticulum).

DISCUSSION

Congenital urinary bladder diverticulum presenting in an adult are rare.⁴ Most of them are asymptomatic and found on routine imaging for other symptoms.⁷ when symptomatic, it can present as recurrent urinary tract infections, swelling over lower abdomen disappeared on micturition as in this case report. It can also present with calculus within the diverticulum, growth, voiding dysfunction, vesicoureteric reflux, urinary retention.⁸ It can be diagnosed with high clinical suspicion, ultrasonogram, CT urography, cystoscopy. It is imperative to determine the status of ureter, preoperatively. Peridiverticular adhesions preclude the transvesicular approach of diverticulectomy.⁹ Diverticulectomy may be performed under open, laparoscopic or robotic surgeries. In this case, open diverticulectomy was performed.

CONCLUSION

Congenital urinary bladder diverticulum can present rarely in adult age group. True bladder diverticula are kept in differential diagnosis, when dealing an adult with recurrent urinary tract infections. Asymptomatic patients can be observed. Symptomatic patients need surgical excision, which is curative.

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