

Urethral Obstruction by a Foreign Body : An Unusual Presentation of Ano-Rectal Malformation with Recto-Urethral Fistula

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Abstract

A 16 months old male child with features of acute urinary and intestinal obstruction due to a vegetative foreign body (FB) impacted in the anterior urethra is presented. The patient had an untreated intermediate ano-rectal malformation (ARM) with wide recto-urethral fistula (RUF). Multiple other congenital anomalies were, also, seen in this patient. The foreign body was removed by an external urethral meatotomy, relieving recto-urethral obstruction. However, the child died of septicaemia 6 hours post-operatively. To best of our knowledge, this is the first case of ARM, presenting with urethral obstruction due to a foreign body.

Key words

Ano-rectal malformations, Foreign body, Recto-urethral fistula.

Introduction

Low urinary obstruction is rare in patients of ARM, unless complicated by congenital urethral strictures, valves, duplication, megalourethra or diverticula. In patients of ARM with RUF, the usual presentation is of urinary tract infection. An unusual presentation, as in our case has not been reported previously.

Case Report

A 16 months old male child was admitted to our unit with acute onset of obstructive urinary and bowel symptoms for 2 days prior to the admission. The parents revealed that since birth the baby had been passing urine

and stool per urethra without any problem. They were aware of the absence of the anal opening, however, since the baby was having multiple congenital anomalies, they were not keen for any treatment. A day prior to the onset of the symptoms, the patient had eaten berries along with seeds. Examination revealed that the child was dehydrated and septicemic. The abdomen was grossly distended with visible bowel loops and a reducible left inguinal hernia. The left testis was undescended and was palpable in the inguinal sac. Anal opening was absent. A foreign body was palpable in the anterior urethra and

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could be milked upto the external meatus. Bilateral leg contractures were present at the knee level (Fig. 1).



Fig. 1. Clinical photograph showing multiple anomalies (Left inguinal hernia with undescended testis, bilateral hypoplastic lower limbs with knee contractures) in a patient of Intermediate ARM with RUF. The urethral FB (arrow) and gross abdominal distension is also obvious.

A large dorso-lumbar meningocele was present. x-ray of the abdomen and chest showed features of large bowel obstruction and deformities of the dorso-lumbar spine. The FB couldn't be seen on x-ray due to its vegetative nature. An ultrasound of the abdomen revealed hydronephrotic left kidney due to uretero-pelvic junction obstruction. A FB (Berry seed) measuring 2×1 cms was removed by an external urethral meatotomy which relieved both urinary and intestinal obstruction. A No. 10F infant feeding tube could be easily passed in the RUF which was located in the bulbar urethra. The patient died of septicaemia before he could be taken up for diversion colostomy.

Discussion

RUF in a male neonate is suggestive of an intermediate or high type of ARM. Rarely, there may be an H-type of RUF, where both urethra and anal opening are patent

(1). Whereas the RUF in high ARM is in the prostatic area, the intermediate group usually has a wide RUF in the bulbar urethra, as in our case (2). It is uncommon to have low urinary tract obstruction in patients of ARM, unless complicated by rare congenital urethral anomalies like megalourethra, urethral valves, strictures, duplications or diverticula (3). The standard treatment of patients with high/intermediate ARM is a diversion colostomy followed by a definitive surgery later on. Post colostomy, these patients, especially those with RUF are prone to get urinary tract infections and hyperchloremic acidosis due to contamination and absorption of urine in the distal loop of gut (4). Furthermore, there is a theoretical risk of urinary obstruction because of debris/stones blocking the urethra. However, a FB impaction as in our case, has not been reported till date in the English literature available with us. The mechanism of obstruction in our patient was a swallowed FB which passed into the urethra from distal gut through a wide RUF. Since there was no anal opening, its impaction at the level of penile urethra produced both urinary and intestinal obstruction.

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