Case Report

Congenital Ceco-Vesical Fistula Associated with Anorectal Malformation: Case Report

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Congenital ceco-vesical fistula (CCVF) associated with high anorectal malformation was not described before. The only described case in 1972 was associated with total colonic atresia, which are not the case. We report a case of CCVF associated with a blind ended distal colon in a 50-day old male presented with high imperforate anus, faecaluria, and epididymo-orchitis of the left testis. The bladder was separated from the cecum followed by abdomino-perineal pull-through of the colon. The relevant literature is reviewed, and the diagnostic modalities and management are discussed.

Index Word: Ceco-vesical fistula - anorectal malformation – Epididymo-orchitis

INTRODUCTION

Anorectal malformations are a group of congenital conditions comprising a wide spectrum in severity from imperforate anal membrane to complete caudal regression.1 Congenital ceco-vesical fistula (CCVF) associated with high anorectal malformation was not described before in any of the classification of anorectal malformations. The only described case in 1972 was associated with total colonic atresia, which are not the case.1,3

CASE REPORT

A 50-day-old male was admitted to the Pediatric Surgical Department of Mansoura University Children Hospital, with imperforate anus associated with heavy fecaluria (Fig.1) and epididymo-orchitis of the left testis. No abdominal distension or vomiting or other signs of intestinal obstruction were noted. The routine blood investigations were normal particularly the electrolytes and acid base balance (no hyperchloremic acidosis). Other anomalies, like cardiovascular or vertebral anomalies were not detected.

Abdomino-pelvic ultrasound revealed fluid-filled urinary bladder with internal echoes. Ascending cysto-urethrogram was performed, which revealed very rapid escape of the dye from the bladder into the gut due to presence of large connection between both.

The case was explored through left lower paramedian incision. The distal end of left colon was blind and located at supravelevator position, without any fistulous connection with the urinary tract. The colonic length from the cecum to the blind end of the gut was 35 cm. The cecum was connected to the back wall of the bladder through a wide fistula (Fig.2).
The bladder was separated from the cecum. The diameter of the resulting defect was about 4 cm. Bladder was closed. Abdomino perineal pull through of the left colon was performed. The opening in the cecum was exteriorized. The patient had uneventful recovery.

Histopathological study of the tissue from the fistulous tract revealed normal cecal wall without any evidence of scarring or inflammation.

**DISCUSSION**

Delayed diagnosis of anorectal malformations after the neonatal period may complicate the surgical repair and may contribute to both functional and psychological problems for the patient and family. Previous studies reported in the literature have been limited to few case reports. 4,5

Epididymo-orchitis is uncommon cause of acute scrotum in infancy. 6 The presence of recto-urinary fistula or another urogenital anomaly in patient with anorectal malformations may explain the occurrence of epididymo-orchitis in these patients. 7 In present case, the main complaint of the parents was not the fecaluria or imperforate anus but tender left sided testicular swelling due to severe epididymo-orchitis.

One hundred and nine cases of acquired ceco-vesical fistula have been described in the literature mostly complicating carcinoma of the cecum, crohn's disease or appendicitis. 8 The only previously described case of congenital patent ceco-vesical fistula was by Antony was associated with total colon atresia where the gut end by the cecum entering the bladder. 9

In our case, the colonic length distal to the ceco-vesical fistula was about 35 cm.

In our case, cecum was connected to the posterior wall of the bladder, partially similar to what occurs in cloacal extrophy, so it may be caused by abnormal persistence or overgrowth of the cloacal membrane. The size and time of dehiscence of this membrane is responsible for the different types of extrophy. 10,11 However, our case differs from classic cloacal extrophy or its variants in the following aspects: 1. presence of normal infraumbilical abdominal wall (in contrast to covered extrophy, mesoderm is deficient); 2. the symphysis pubis is normal without diastasis; 3. normal external genitalia; 4. normal anterior bladder wall (it is not divided into 2 halves in contrast to various types of extrophy; 5. long colon distal to the fistula(35cm) and; 6. absence of intestinal mucosal plate.

**REFERENCES**


