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CASE REPORT

Spontaneous scrotal faecal fistula in a neonate: report of a case

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Abstract
A 21 day old boy with spontaneous scrotal faecal fistula following a neglected strangulated right inguinal hernia is reported. He had necrotizing fasciitis of the right scrotum with sparing of the testis. He successfully had debridement, herniotomy and bowel resection with end-to-end anastomosis. This is a rare occurrence in infants and seems to result from late presentation. Health education coupled with early referral and prompt repair of inguinal hernia in neonates and infants would reduce this complication.

Key words: Scrotum, faecal fistula, neonate, herniotomy

Introduction

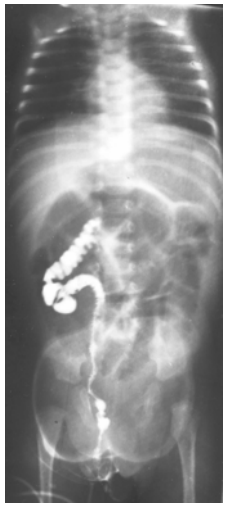
Faecal fistula from incarcerated inguinal hernia in infants is rare. The incidence of strangulation of inguinal hernia in children is however between 10-17%. [1] We recently managed a neonate with spontaneous faecal fistula from incarcerated inguinal hernia, which form the basis of this report.

Case report

A 21-day-old full term boy presented with a 4-day history of discharge of faecal matter through a hole on the anterior aspect of the right hemi-scrotum. The parents had noticed a right reducible inguino-scrotal swelling since birth. The swelling became irreducible 3 days before the onset of faecal discharge. The child had become irritable and constipated. He had also refused feeds. He had abdominal distension with several episodes of bilious vomiting and redness of the swelling. The symptoms subsided with the onset of faecal discharge.

The boy weighed 2.0kg at presentation. He was dehydrated, pale and had a temperature of 37.5oC. The heart rate was 130 beats/minute, regular and normal heart sounds. The chest examination was normal. The abdomen was flat. There was no evidence of intestinal obstruction. A right irreducible inguino-scrotal hernia with inflamed scrotal skin was found. There was a fistula through the anterior scrotal wall, discharging faecal matter. The right testis was completely exposed, while the left was well descended. There was no hernia on the left. Rectal examination showed an empty rectum and minimal normal stool was found on the stall of the examining finger. The packed cell volume was 25%, white cell count 6.0 x 109/l, urea 10mmol/l, creatinine 110mmol/l. The serum electrolytes were: Na 130 mmol/l, Cl 110mmol/l, K 3.8 mmol/l and HCO- 26 mmol/l. Dehydration was corrected and patient had blood transfusion to correct anaemia. A barium study of the fistula was done using dilute barium sulphate (Figure1). This showed the fistula in the distal ileum. At surgery, through a right inguinal incision, the findings were; strangulated inguinal hernia containing a loop of bowel, which was adherent to the scrotum and discharging faecal matter. There was necrotizing fasciitis of the scrotum around the fistula. The right testis was completely exposed but normal. The strangulation was released, ileal loop freed from scrotum by blunt dissection, and a segment of the ileum containing the fistula resected and an end-to-end ileal anastomosis effected. Hernitomy was performed, and inguinal incision closed. Debridement of the scrotal fasciitis was done. The fascia was closed over the testis and skin left unsutured. The scrotal wound was closed after 1 week. The child was discharged but has since been lost to follow up.

Figure 1: Fistulogram showing fistula in distal ileum



Discussion

Spontaneous faecal fistula is a rare in infants. Most reports are from Africa[2] and India[3-5] which have fewer health care facilities compared to developed countries.

Neglect of inguinal hernias in infants may lead to incarceration with subsequent strangulation and faecal fistula formation. In adult hernias in developing countries, intervention by herbalists can cause fistula formation or bowel evisceration. [6, 7] There was no such history in this report. Strangulation is may be associated with testicular ischaemia and infarction. [4, 5] This would necessitate orchidectomy. In some reports the testes were preserved[2, 3] as in this report. Necrotizing fasciitis of the scrotum is also an associated finding in this patient and other reports. [2] Prompt debridement and covering of the testis with scrotal skin should be carried out.

Though complete gangrene of the hemiscrotum is rare when faecal fistula is present, prompt debridement and operative reduction of the hernia after resuscitation would prevent further necrosis of the scrotum. Bowel continuity is established after resection of the fistula and debridement of the scrotum done. Prompt treatment of hernia in neonates and infants should prevent this complication.

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