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CASE REPORT

SCROTAL APPENDICITIS IN A CHILD MIMICKING RECURRENT TESTICULAR TORSION

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CASE REPORT

A 15-month-old boy (one of a set of identical twins) recently presented to our hospital with recurrent episodes of painful right scrotal swelling associated with mild pyrexia, vomiting, refusal of feeds and failure to thrive. He had had a left herniotomy 8 months previously and had developed a right inguinoscrotal swelling which appeared 4 months later. Paediatricians had excluded associated malaria, sickle-cell disease and intestinal parasitic infestation. Recurrent incarcerated inguinal hernia or recurrent testicular torsion was suspected. Clinically the child was afebrile and pale and weighed 8 kg (his identical twin weighed 13 kg). The chest and cardiovascular systems were normal. There was an inguinoscrotal hernia on the right side which was tender but reducible. The left side was normal. The child's haemogram was 9.3 g/dl.

At herniotomy, the hernial sack was thickened and the appendix was adherent to it. The caecum and the entire appendix formed part of the sac. The appendix appeared oedematous. The testis and cord looked normal. Appendicectomy was done. The caecum was pushed back into the peritoneal cavity and the hernia was repaired. Histology of the appendix confirmed appendicitis showing a mixture of cells of acute and chronic inflammation.

The child developed postoperative pyrexia and febrile convulsion that was caused by malaria. This was controlled, and the child did well. He was discharged two weeks postoperatively. At follow-up 16 weeks after the operation, the child was in a good condition and weighed 10 kg.

DISCUSSION

Acute appendicitis in the child and infant is not common before the age of two years and is extremely rare in neonates with less than 2% of paediatric appendicitis occurring in this age group[1,2]. It is, therefore, rarely considered in the differential diagnosis of acute abdomen in the newborn[2]. The appendix may present in a hernial sac in the scrotum commonly as part of a sliding hernia. Rarely it may present as acute scrotum with no previously observable inguinoscrotal hernia; perhaps the inflamed appendix insinuates through the remnant of the processus vaginalis[3].

The appendicitis in our patient may well have been due to strangulation of the appendix from recurrent incarceration of the inguinal hernia[4,5]. A delay in recognition may result in complications of the appendicitis, with scrotal abscess[1,6] and scrotal fistulae[1,4,6]. Though scrotal appendicitis has been cited periodically in the literature, it has always posed a different clinical challenge when encountered. The complications and morbidity related to scrotal appendicitis are less than those found with intra-abdominal perforated appendicitis as the scrotum tends to contain the disease progression, localizing and excluding it from general systemic response. Early recognition and a prompt treatment could possibly avoid morbidity in such situation.

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Editorial Comment:

Inflammation of the appendix in infants and children presenting with acute scrotal symptoms or signs is very rarely encountered; less than 20 cases have been reported so far in the Western literature.[1,2] A revision of these cases and the case presented in this article indicates that a patent processus vaginalis is a prerequisite for an inflated appendix to insert itself down into the scrotum. Surgical exploration should be advised in any child or neonate presenting with acute abdominal pain associated with an acute scrotum. We congratulate the authors on this interesting case; it would have been useful, however, to include some pictures illustrating this rare condition.

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