SUMMARY: The presence of a left-sided caecum and appendix in an inguinal hernia sac is reported. It is the first description of such an occurrence.

Case report

A 2 year old boy was admitted to Kingston General Hospital as an emergency. It was known that he had a left-sided inguinal hernia and had been on the waiting list for operation for three months. He had been unwell for a day with abdominal pain, had vomited 3 times and his bowels had been opened once.

Examination revealed a child crying constantly, and with a tense, tender irreducible left inguinal hernia. Bowel sounds were present and the liver and stomach were normally placed. A plain radiograph of the abdomen (Fig. 1) revealed no evidence of intestinal obstruction. It did, however, show a soft tissue shadow in the left groin containing gas. The stomach was filled with gas and was normally placed; the gas shadow of the large bowel could be seen to extend from the left iliac fossa to the splenic flexure, then down

* Now: Anzuk Military Hospital, Anzuk, F.P.O.5
again to the rectum. It was thought that a malrotation was present and that the hernia sac might contain caecum and appendix, or sigmoid colon.

At operation an indirect inguinal hernia sac was found. When opened it was seen to contain caecum and appendix. The appendix was inflamed and adherent to the sac. The appendix was freed and this enabled the caecum to be fully delivered. The terminal ileum joined the mobile caecum from the right hand side.

The appendix was removed and a herniotomy performed. He made an uncomplicated recovery. It was emphasised to his parents that his appendix had been removed even though the incision was on the left side!

Discussion

There are 2 anatomical abnormalities which result in a left-sided appendix. One is situs inversus viscerum which is defined as transposition of the abdominal viscera (Wakeley 1933, Blegen 1949).

The other is malrotation of the midgut loop, in which the small gut lies chiefly to the right of the midline, while the terminal ileum crosses the midline and enters the caecum from the right-hand side. The colon is confined to the left side of the abdomen (Fraser and Robbins 1915; Dott 1922).

The literature, particularly in relation to left-sided acute appendicitis, has been reviewed previously (Owen-Smith 1969).

About 25 per cent of inguinal herniae in children occur on the left side (Zimmerman and Anson 1953), and the presence of caecum or appendix in a right-sided inguinal hernia sac has been frequently described (David 1923, Herzfield 1925, Rack and Webb 1954, Zimmerman and Anson 1953). However, there does not appear to be a report of an appendix occurring in a left-sided inguinal hernia sac. Only previous personal experience of an acute left-sided appendicitis in a child with malrotation of the midgut loop enabled it’s presence to be suspected before operation in this case.

REFERENCES