STRANGULATED APPENDIX IN A HERNIAL SAC

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The appendix is notoriously variable in its position, and its presence in a hernial sac, while uncommon, is within the personal experience of most surgeons.

Garland,[1] with transatlantic brevity, applied the term 'femoral appendicitis' to an inflamed appendix in a femoral hernia. This nomenclature could be extended as in inguinal appendicitis (indirect and direct), obturator appendicitis, and scrotal appendicitis, all of which have been described. The condition has unaccountably no eponymous association.

Of all cases of appendicitis, 0·13% occur in hernial sacs;[2] while the appendix is found in 0·77% of hernial sacs.[3] Some hernial appendices are uncomplicated; the rest may present with two complications, viz. acute appendicitis or strangulation of the appendix.

It is interesting to note that the first recorded appendicectomy was one in a hernial sac, performed by Claudius Amyand of St. George's Hospital, London, in 1735.[4] Many of the early appendicectomies were only incidental in that, being superficially situated in a hernial sac, they presented with suppuration or obvious swelling, and the exact diagnosis was made only at operation.

The following case is presented because it combines the features of an ectopic appendix in an indirect inguinal hernial sac, complicated by strangulation, in a neonate.

CASE REPORT

P.M.J., a 3-week-old male infant, was admitted to hospital on 20 May 1960 with a mass in the right groin for nine hours. The first symptom noted by the mother was repeated vomiting the night before admission. There was no constipation or passage of blood per anum.

The child was a full-term normal infant of 6½ lb. birth weight. Labour had lasted 62 hours and a pitocin drip was necessary. Since birth it had been breast fed.

On examination, the general condition was good; the abdomen was soft and not distended and the only positive finding was a dense mass in the position of a complete right indirect inguinal hernia.

Under general anaesthesia ('fluothane', gas and oxygen *via* an endotracheal tube—Dr. F. Sambrook) the hernia was approached through an oblique inguinal incision. As soon as the external ring was opened, the contents of the hernia could be seen sliding back into the abdomen, so that the external ring must have been the constricting agent. The sac was opened forthwith and a quantity of yellowish, turbid, but not offensive, fluid escaped. The only contents were an oedematous, congested, plum-coloured appendix and the apex of the caecum which had undergone similar changes (Fig. 1).

The appendix was removed, but the stump was ligated and not inverted, because of the oedema of the caecal wall. The hernial sac was isolated and transfixed and the transversalis fascia was

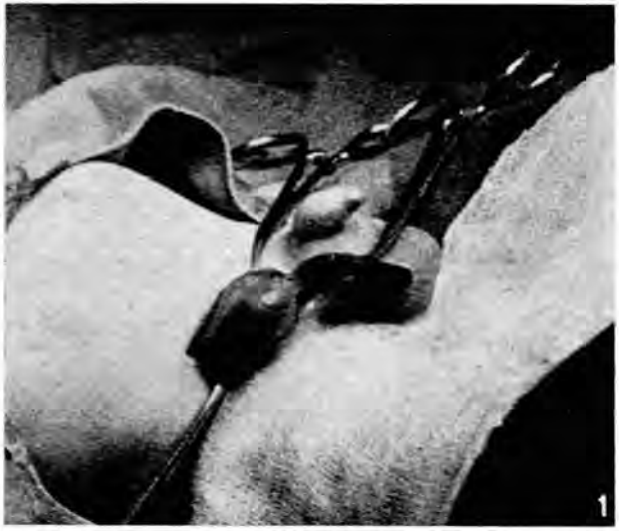

Fig. 1. Shows the darkened appendix and caecum presenting through the right inguinal incision.

plicated with two No. 60 thread sutures medial to the internal ring. Apart from a mild wound infection, recovery was uneventful.

DISCUSSION

The diagnosis can be made pre-operatively. As Reif[5] pointed out, if the primary complication is acute inflammation, abdominal symptoms will precede those localized to the site of the hernia, but when the hernial strangulation is primary, the abdominal signs will succeed the local ones. In a fair number, the diagnosis will not be made, but fortunately this is not of significance, for direct surgical attack is indicated in any case.

Reference to the literature reveals only 2 cases occurring at an earlier age than the one reported here. Reif[5] reported a gangrenous appendix in a scrotal hernia in a 2½-week-old child, and Beattie[6] described a strangulated appendix in an inguinal hernia in a premature infant of 3 weeks of age, 5 weeks before it was due to be born!

I should like to thank Mr. G. C. Sawyer for allowing me to treat and report this case.

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