demonstrated in silver-impregnated sections of foetal tissues of experimentally infected guinea-pigs by Babudieri and Biocca (1941) and in the foetuses of pigs and cattle by other workers, but they have been isolated only from animal foetuses examined immediately or very shortly after death (Ryley and Simmons, 1954).

Though we have no proof that the human foetus was infected there is sufficient evidence in previous work on human and animal abortions to indicate that it probably was. In any case it is reasonable to suppose that the mother's leptospiral infection in one way or another resulted in the death of the foetus.

It is important, therefore, to be aware of the possibility of leptospirosis in cases of feverish illness during pregnancy in persons living or working in situations where sources of infection are known to exist. One can then endeavour to suppress the septicaemia by prompt antibiotic treatment and so reduce the risk of the foetus becoming infected.

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Medical Memoranda

Strangulated Obturator Hernia with Acute Gangrenous Appendicitis

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Obturator hernia is a rare clinical condition, and when it presents in close causal relationship with an acute gangrenous appendicitis the combination is singularly unusual and indeed has not been recorded. The following case is therefore of interest.

CASE REPORT

A man aged 36 presented with periumbilical abdominal pain and vomiting of three days' duration. Within 24 hours of the onset of symptoms the pain had spread to the right iliac fossa. He had been constipated for two days but had been passing flatus. There were no urinary symptoms. He had had intermittent lower abdominal pain for the previous six years; it had never radiated down the right leg or into the right knee but into the small of the back.

On examination his tongue was furred and halitosis was pronounced. His temperature was 99.8° F. (37.7° C.). The abdomen showed no distension; he was tender in the right iliac fossa with some guarding. There was an ill-defined and tender mass 3 in. (7.5 cm.) across just to the right of the symphysis pubis above the inguinal ligament. There were no swellings in the hernial orifices. Rectal examination revealed tenderness to the right but no mass could be felt.

The clinical picture was thought to be compatible with acute appendicitis with mass formation; the mass was clearly atypical in position, but this might have been due to an atypically placed appendix—along the inguinal ligament towards the symphysis pubis.

The patient was treated with intravenous fluid and tetracycline as a case of appendix mass. In the ensuing 24 hours considerable subjective improvement occurred. The pain, tenderness, and vomiting subsided, but the mass remained unchanged. The subsequent 24 hours produced a completely different picture with rapid abdominal distension, recurrence of vomiting, and colicky abdominal pains. There was no doubt now that the intestinal obstruction had supervened and he was prepared for operation.

At laparotomy a knuckle of terminal ileum was found to have been caught in an internal hernial sac below the superior ramus

of the pubic bone; this was later traced to the obturator canal. The bowel was freed with some difficulty after stretching the neck of the sac; the bowel was haemorrhagic but viable. After reduction it was noticed that the appendix in fact formed part of the posterior wall of the sac, so that this hernia was indeed of the sliding variety. The appendix was gangrenous and was removed. The sac was not excised in its entirety; it was rather large and dissection was rendered tedious by the considerable degree of congestion. The neck was therefore approximated with silk sutures and the peritoneum further sewn over the repair with catgut. His postoperative course was uneventful and he was discharged on the tenth day.

COMMENT

The discovery of obturator hernia in this patient was a complete surprise. This is not an unusual presentation, for the diagnosis is seldom made preoperatively, though with a high degree of suspicion a fair proportion can be diagnosed. However, in retrospect, most cases at least show some of the classic features of obturator hernia—advanced age, lean body habit with recent loss of fat, distribution of pain in the course of the anterior branch of the obturator nerve (Romberg-Howship's sign), with or without tenderness in Scarpa's triangle, and a palpable mass in the pelvis. Discrepancies are to be expected (Archampong, 1968).

There are as yet some unexplained aspects of hernia formation in the African. Zivanovic (1968) attributed the high incidence of inguinal and femoral herniae in East Africa to the unusually low position of the pubic arch. It is probable that this peculiarity of the African pelvis may influence other forms of herniation in the lower abdomen. Certainly this line of investigation is worth further study.

I wish to thank Dr. M. A. Barnor for referring this patient for treatment, and Dr. A. B. Amisah for the careful notes he made of the patient.

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