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MEDICAL MEMORANDA

Pancreatic Ascites

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Ascites is common in Uganda, being a manifestation of hepatic cirrhosis, renal disease, malabsorption, malnutrition, neoplasm, particularly hepatoma, peritoneal tuberculosis, and heart disease, especially endomyocardial fibrosis. Furthermore, it is much commoner in other forms of heart disease than it is in Europe or the U.S.A. (Somers, Brenton, and Sood, 1968). We report here the case of a patient whose ascites was completely cured by surgery.

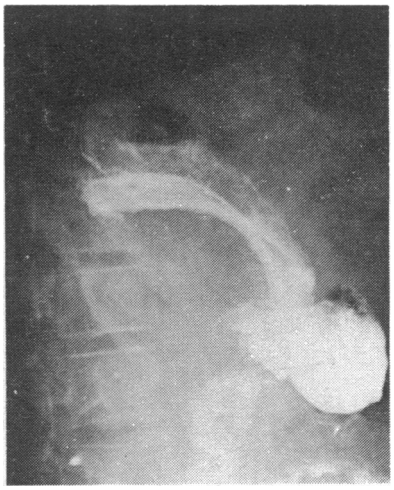
Case Report

The patient, a 16-year-old Rwandan boy, had intermittent vomiting for one month, swelling of the left leg for six days, and abdominal pain and distension for three days. Examination showed gross ascites and left femoral vein thrombosis but no other abnormal physical signs. The ascitic fluid was blood-stained (protein 120 mg/100 ml) and the prothrombin time was prolonged, so the venous thrombosis was not treated with anticoagulants. After complete paracentesis no intra-abdominal masses or organs could be palpated except for a slightly enlarged spleen. The fluid reaccumulated within 24 hours.

Other investigations showed no neoplastic cells in ascitic fluid or bone marrow; no tubercle bacilli on smear or culture of fluid; urine normal except for occasional glycosuria; glucose tolerance test, mild diabetic curve; haemoglobin initially 12·9 g falling to 8·0 g/100 ml; liver function tests normal, including total serum proteins (differential not available); serum amylase 291 Somogyi units/100 ml. Barium studies showed a mass behind the stomach (see Fig.)

The venous thrombosis resolved while investigations were in progress but the ascites responded poorly to diuretics and salt restriction. Nausea, anorexia, and intermittent vomiting continued. At a second examination the ascitic fluid was straw-coloured (protein 70 mg/100 ml) but at a third examination it was turbid, with many polymorphs (protein 5·5 g/100 ml). Ascitic fluid culture was sterile on each occasion.

At laparotomy (performed by R.C.) a pseudopancreatic cyst about 15 cm in diameter was found displacing the stomach and transverse colon anteriorly. About 1 litre of straw-coloured ascitic fluid was drained but the cyst itself contained altered blood. Multiple fibrinous adhesions between loops of small intestine were easily divided by blunt dissection. Some oedema was noted in the root of the transverse mesocolon and the pancreas itself could not be clearly defined. The spleen was slightly enlarged but no other abnormality was found. A cystogastrostomy 3 cm in diameter was fashioned in the posterior wall of the stomach via an anterior gastrotomy.



Barium-meal study showing mass behind stomach.

Biopsy specimens of the liver and subpyloric and aortic lymph nodes were normal. Histological examination of the cyst wall showed granulation tissue. Postoperative progress was uneventful. There was no further vomiting or recurrence of the ascites. He gained weight and his appetite improved. A repeat glucose tolerance test was normal.

Comment

Since 1958 21 cases of ascites due to pancreatic disease (excluding malignancy) have been reported, as reviewed by Dreiling (1970). Two of these patients had pseudocysts resulting from blunt trauma but most were middle-aged patients with a history of alcoholism and pancreatitis. Our patient had fallen from his bicycle some weeks before admission. Some patients improve with diuretics and pancreatic enzymes (Lasare *et al.*, 1969).

The mechanism of the ascites is obscure. Dreiling (1970) noted that though the serum amylase activity was not raised in all cases of pancreatic ascites the amylase level was always very high in the ascitic fluid. A simple estimation of the ascitic fluid amylase would be helpful in the diagnosis of ascites of obscure origin.

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