a case of hydatid cyst of the liver

PRESENTED AT A CLINICAL MEETING OF THE DEPARTMENT OF SURGERY, MEDICAL SCHOOL, MALTA.

8th Oct. 1969

Clinical History

Mr R. Attard (1) : "P.F. a 39 year old male labourer (case no: Cas. 15720/69) was admitted to M.S. II on the 8th September 1969 at 6.45 a.m. with a 10 hour history of moderate hypogastric pain and some nausea, but no vomiting. The pain came of suddenly and was not colicky but constant. He was obese, ill but not shocked, mildly dyspnoeic and slightly icteric. The abdomen was somewhat distended and fixed mass palpable in the epigastrium, not very tender. No lymphadenopathy.

The day after admission some pyrexia and sweating was recorded which later lasted a few days. (see temperature chart 1). Pulse was 142/min, respiratory rate 25/min. BP. 170/110.

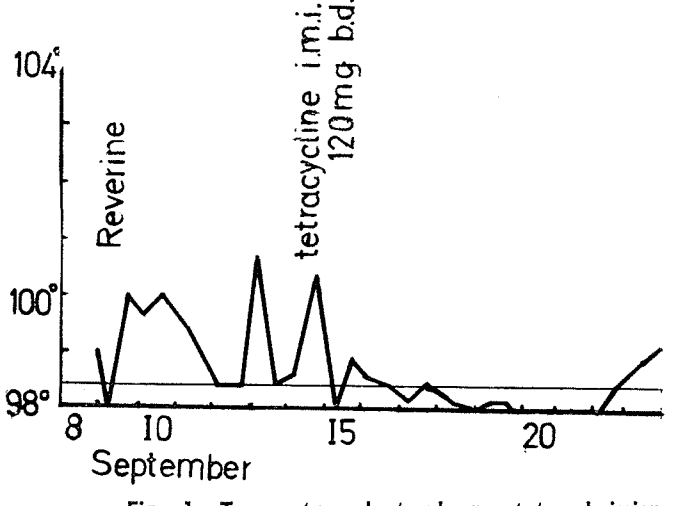

Fig. 1. Temperature chart subsequent to admission.

Treatment consisted of intravenous fluids; Reverin and Algaphan, and gastric aspiration. His condition subsequently improved and the intravenous therapy discontinued after six days. Nine days after admission the epigastric mass became mobile being also hard and irregular. No definite tenderness was elicited. Bowel sounds were infrequent.

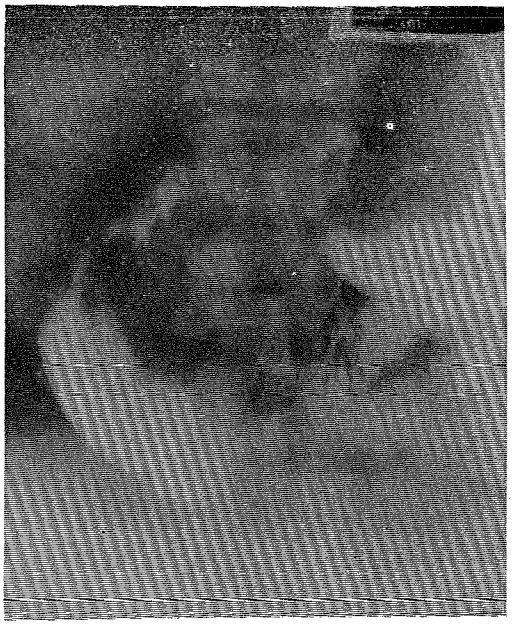

Fig. 2. Barium meal showing the splayed out duodenal loop.

INVESTIGATIONS:

Haemoglobin: 103% ESR: 10 mm/hour.
WBC: 18,000/cu.mm.,
serum amylase: 300 units/100 ml.
serum bilirubin: 2.1 mg/100 ml.
Van Den Bergh: indirect.
S.G.P.T.: 34 I.U./Litre.
Casoni test: *negative*
serum electrophoresis: *"reduction in albumin with a marked increase in alpha 1, and a slight increase in alpha 2, significant reduction in beta and absolute reduction in gamma-globulins."*
Barium meal: *"no ulceration or filling defects in stomach; lower portion of stomach and duodenum displaced outwards and the duodenal loop is splayed out, suggesting an enlarged head of the pancreas:- ?NG".*
Urinalysis: protein ++, occasional RBC, WBS., granular casts, bilirubin +, urobilinogen absent.
Faecal occult blood was positive in two of four specimens.

Discussion

The differential diagnosis seems to lie between (1) pancreatic cyst (2) hydatid cyst of the liver (3) choledochus syst.

(1) The barium meal appearance suggests a pancreatic cyst. The dramatic presentation may be explained by haemorrhage or infection occuring in a true cyst. The presenting picture was not typical of acute pancreatitis and the

mass was present "ab initio". These facts are against the diagnosis of pseudocyst. The mobility of the mass is a strong argument against pancreatic pathology.

(2) The diagnosis of choledochus cyst was unlikely in view of the situation and vertical mobility of the swelling. (A case of Choledochus cyst was recalled which was drained to the exterior with fatal results).

(3) The diagnosis of hydatid cyst would fit in with the clinical picture in spite of the negative Casoni test.

The impressive displacement of the lower stomach and splaying of the duodenal curve in the roentgenogram led to the general conclusion that the swelling was probably arising from the pancreas."

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At a subsequent meeting on 12th Nov. 1969.

Mr R. Attard : "I explored the patient's abdomen and found that he had a very large multiloculated hydatid cyst of the liver. I tried to aspirate the cyst and inject formalin solution, but could only obtain a few c.c.'s. So after probing around the mass, I opened the cyst and enucleated the daughter cysts mainly by scooping them out with a spoon. This left a thin cyst wall inferiorly, the rest of the cavity being made up of liver tissue. I took a biopsy of the capsule and then marsupialised the cavity packing it with gauze.
Histological diagnosis: *Taenia Granulosa cyst. No scoleces seen.*

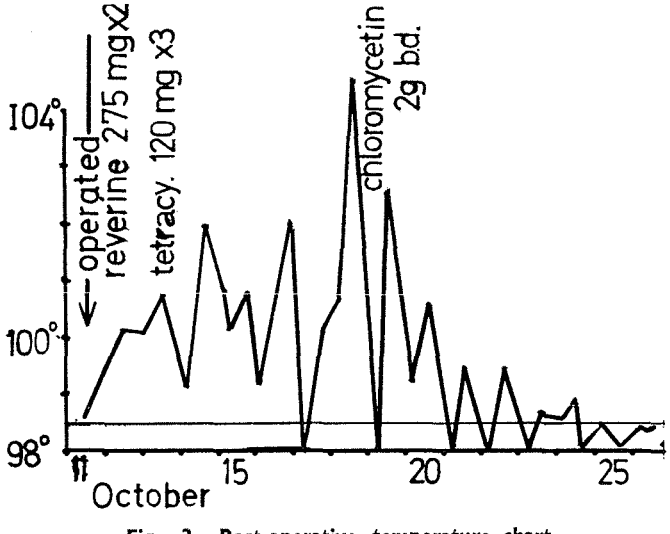

Fig. 3. Post-operative temperature chart.

Where did we go wrong in the diagnosis? We repeated the Casoni test and obtained a negative result.

After operation, the patient developed some pyrexia which respond to Chloromycetin 2g b.d. for thirteen days, when the temperature returned to normal. (see temperature chart 3). Then, after the pack was removed, a slight purulent discharge appeared through the track. On the 2nd November the patient started passing bile through the drainage wound to the order of 700-900ml every 24 hours. We put a tube into the fistulous track and collected the efflux into a bag. Six days later the discharge was only 200ml in 24 hours. This biliary fistula at first worried me since I feared it might be due to slough in the cavity wall separating and causing a communication with a bile duct radicle.

Incidentally, the cyst at operation was found to be somewhat pedunculated and encroached on the lesser sac pushing the stomach forwards and to the left, also splaying out the duodenum. This explained the radiological appearance."

Profs V.G. Griffiths (2) : "Mr Muscat had a case of hydatid cyst in a rib. Recently I had a case of hydatid cyst in the rectus muscle (reported in St. Luke's Hospital Gazette). I have had a few hepatic hydatid cysts, one was the case of the "disappearing cyst", since the mass varied in size from time to time. We later found that this not uncommonly happens in the liver, due to the cyst emptying into a bile duct periodically. I excised the cyst with a remnant of the right lobe of the liver. Two or three years ago, Mr Amato had a remarkable hydatid cyst of bone."

Mr Attard : "How should one deal with a biliary fistula when this occurs post-operatively?"

Profs Griffiths : "It should dry up spontaneously — one should treat expectantly, initially.

Greece has a high incidence of hydatid cysts. So have Argentina, Australia, New Zealand and Wales."

ACKNOWLEDGEMENT

We wish to thank Professor Griffiths and Mr Attard for permission to publish this case.