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A Young Man with Pain and Mass Epigastrium
A Case of Pancreatic Pseudocyst

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HISTORY

Mr. S. A. Khan 24 years of age business man of lower middle class, non somker, non alcoholic resident of Hafizabad was admitted in surgical ward on 11th December, 1986, with complaint of pain in the epigastrium since the age 15 years. To begin with it was a dull ache localized in the epigastrium without any radiation, lasted for few hours only, relieved on its own and occured after 1-1½ years.

For the last five years pain occured in form of severe attacks with tremendous increase in its severity lasting for 2-3 days occuring every 1-3 months. It was severe crushing in character, radiating to left shoulder, lasting for 2-3 days. Increased on movement, remained static on lying still and decreased with injectible pain killers.

Occasionally severe pain was accompanied with vomiting for the last one year, dull ache persisted in between the attacks. Though there is no relationship of pain with food, even then the patient avoided intake of solid diet for the last 6 months. During this time he lost about 10 kg weight. Last attack occured 2½ months from the date of admission. After every attack patient remained constipated for a few days. Otherwise he had normal bowel habit, appetite was alright except during the attacks. There was no history of diarrhea, Dyspepsia, hematemesis melena, jaundice or fever before during or after the attack. There was no urinary complaints. No history of cough & dyspnoea.

Patient had recurrent attacks of abdominal pain in the past probably due to pancreatitis. There is history of mumps in childhood.

EXAMINATION:

Young co-operative ill looking man with average built and height.

Pulse was 90/minute regular. B.P. was 120/mm of Hg. Temperature was 98.4 F^{O}, respiratory rate 18/m weight was 65 Kg. J.V.P. was not raised. Pallor, Cyanosis, jaundice clubbing and edema were absent. There was no evidence of lymphadenopathy.

RADIOLOGICAL REPORTS

Barium Meal:

Normal esophagus, stomach, duodenal cap and loop.

Barium Follow Through:

Normal esophagus and stomach. Normal duodenal cap and loop but the duodino-jejunal junction and jejunal loops displaced to right side by a soft tissue mass in relation to the body and tail of pancreas. No other abnormality is seen. Normal terminal ileum.

Ultrosound Abdomen:

Normal liver gall bladder and spleen. Pancreatic cystic lesion measured 6.9 x 6.9 cm. Normal kidneys ureters and bladder.

C.T. Scan Abdomen:

Normal liver, gall bladder and spleen. The pancrease is enlarged with a cystic lesion in the tail of the pancreas with some calcification. Appearance is of chronic pancratitis with pseudocyst formation. Normal kidneys, ureter and bladder.

Here we had a young man with firm mass in the epigastrium complaining of recurrent attacks of pain in epigastrium.

A provisional diagnosis of pseudo cyst of pancreas was made. As the attacks were more likely to be of pancreatitis so we planned investigations accordingly.

Routine urine examination was normal.	
Routine stool examination was normal.	
X-ray chest	Normal
E.C.G.	Normal

Following blood tests were done:—

a. W.B.C. count 6.4
b. Polys 80%
c. Lymphos 20%
d. Hb 13.5
e. E.S.R. 52 mm
f. Serum amylase 390 somogyi
g. Urea creatinine, Na +K were within normal limits.
h. Antibody titre for echinococcus granulosis was less than 1 : 100 (Negative)

Blood profile showed only raised E.S.R. and serum amylase antibody titre the echinococcus granulosis was carried out keeping in view the hydatid cyst disease.

Pre-operative preparation of bowels with laxative and prophylactic antibiotic cover was instituted. Under G. A. Through upper mid line incision, laparotomy was done.

A big mass in the lesser sac was found in relation to tail of pancreas attached to post wall of stomach encroaching upon spleen, which was enlarged twice its size. Mass was adherent to adjacent structures. Liver, gall bladder, colon and mesentery were normal. Pancreas was swollen and knobby. After isolation of cyst, its cavity was entered in from lateral side after removal of spleen debris, pus and blood came out from the cyst. Spleen, tail of pancreas and 1/4 of cyst wall was removed. Cyst wall repaired, surgical toilet of the cystic cavity carried out. Cyst opened into stomach through its post wall, where it was adheraent to stomach. Proper cysto gastrotomy was fashioned. Drainage tube placed into cyst cavity through the cysto gastrotomy and brought out through the anterior abdominal wall as formal gastrotomy tube.

Post Operative Course.

Post operatively the patient made satisfactory recovery, gastrostomy tube was removed on 10th post operative day. By that time patient was taking normal diet and he was discharged after another couple of days.

A few words about problems and difficulties of operation on pancreas. Firstly, it is the deepest retroperitoneal organ lying in the thorasic part of abdomen, so the approach to the pancreas is not a direct one.

Secondly, there are so many structures all around pancrease so you have to be very careful, otherwise you are very prone to damage any one of them. Thirdly, it holds stitches with difficulty and its enzymes are very corresive to surrounding structures.

Apart from general complications of any abdominal operation, the major complications of operation are bleeding from incised edge and pancreatic fistula.

A few words about pancreatic pseudo-cyst.

Pancreatice pseudo-cyst is collection of fluid, serum and haematoma in the lesser sac. It is called pseudo-cyst because its wall is devoid of epithelial lining.

At some point most pseudo-cysts communicate with the pancreatic glandular tissue and the ductal system and discharge of fluid is maintained into the cyst via this connection.

Most pancreatic pseudo-cysts follow an attack of acute Pancreatitis in the adults, whereas in children commonest cause is blunt abdominal trauma. Incidence is 15% folowing pancreatitis related to alcoholism and 3% in pancreatitis associated with biliary diseases.

Complications of Pancreatic Pseudocyst:

1. Rupture.
2. Haemorrhage
3. Abscess.
4. Common bile duct obstruction.

There are two types of pseudo-cysts of pancreas:—

a. Ac. pseudo-cyst which follows an established attack of Ac. pancreatitis about 20 to 50% ressolve apontaneously usually within 6 to 7 weeks, after this most of the remaining cysts require some from of drainage (Internal or external). Since the incidence of complications is high in those treated conservatively for long time, this management of Ac. pseudo-cysts is expectant for first 4 to 6 weeks, which allows the cyst wall to become mature. If it does not resolve in this period, it should be treated surgically.

b. Chronic Pseudo-cysts:
These are usually asymptomatic and recent attack of ac. pancreatitis can not be identified. Spontaneous resolution is rare in these cases, surgical treatment is the only course left.

The guide line for the management of pancreatic psendocust is as follows:—

a. Size: cyst up to 5 cm in size may be observed. After 7.5 cm size will require surgical drainage.

b. Symptoms: Symptomatic pancreatic psendocyst should be treated surgically.

c. Vascular compliation: These include pseudo

aneurysm and left sided portal hypertension from splenic vein thrombosis.

There are two types of drainage:–

1. Internal
2. External

Additional precautionary measures associated with surgical treatment are:–

1. Fluid cytology:
2. Cyst wall histopathology.

QUESTIONS

Q. 1. What is the cause of pancreatitis in this case?
Ans: We could not trace out the cause in this case.

Q. 2. What were the causes of splenic abscess.
Ans: Most probable cause is that mass anchoring upon spleen, got infected and resulted in abscess formation.

Q. 3. What are complications of splenectomy?
Ans: As it is concerned with cellular immunity, so patient is more prone to bacterial and fungal infections

COMMENTS

DR. ANWAR *(Gastroentrologist)* Pseudocyst can be diagnosed on E.R.C.P. should not fill the cyst with the dye. Once visualised, antibiotics should be started. Pancrease divisum may be diagnosed as cause of pancreatitis.

DR. KHURRUM *(Gastroentrologist)* The term of Pseudo pancreatic cyst was corrected as pancreatic pseudo cyst.

PROF. MAHMOOD AHMED *(Prof. Surgery)* talked about various other types of pancreatic cysts, told details of operation, its compliation and its post. operative management.

CHAIRMAN Emphasized on detailed history taking and physical examination and stressed on clinial judgement.