CASE REPORT

Pancreatic Pseudocyst Manifesting as Massive Upper Gastrointestinal Bleeding

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ABSTRACT

Pancreatic pseudocyst developing as a result of acute pancreatitis and manifesting with massive upper gastrointestinal bleeding is rare. We report a case of pancreatic pseudocyst who manifested as massive upper gastrointestinal bleeding from the cyst which was converted into a pseudoaneurysm during the evolution of the disease.

The incidence of massive upper gastrointestinal bleeding from pancreatic pseudocyst has been reported to be as high as 10% (1). The bleeding may occur either because of rupture of the pseudocyst, or owing to other causes such as concomitant peptic ulcer, acute "stress" erosions of the gastric mucosa, or rarely from esophageal varices secondary to portal vein compression by the cyst (1, 2). Often the bleeding may even occur into the cyst itself, when a major vessel is eroded resulting into a pseudoaneurysm (3).

We are reporting this case to highlight the difficulties that we faced both in diagnosis and management, as massive upper gastrointestinal bleeding from the pancreatic pseudocyst, although a known complication is very uncommonly seen. This case thus underscores the necessity of a high index of suspicion on the part of the clinician to make the diagnosis.

CASE REPORT

In April 1981, a 35 year old male patient, a chronic alcoholic consuming about a quart of indigenous liquor for the past 7 years or so, was referred to us from a district hospital complaining of dull pain in the epigastrium since the last 3 months. The pain was not related to meals or to fatty food, and did not radiate to the back. He also complained of malena, but it was not
associated with hematemesis. He gave history of similar pain 3 months ago, which was associated with hema-
temesis and was followed by malena. He had been investigated for these complaints in the district hospital, but without arriving at any definite diag-
nosis.

On examination, marked pallor was noticed. There were no signs of liver cell failure. The abdomen was of normal contour and no superficial veins were visible. Palpation revealed a non-tender abdomen. No lump was palpable. Liver and spleen were not palpable and no free fluid was detected. Rest of the systemic examination was unremark-
able.

A presumptive diagnosis of peptic ulcer disease was made and he was put on bland diet, antacids, antichol-
nnergics and was investigated along those lines.

His hemoglobin was 2.6 g/dl and ESR at the end of one hour was 46 mm. The total and differential counts were normal. Stool showed presence of occult blood. Blood chemistry viz. blood urea, blood sugar, serum amylase, serum electrolytes, serum bilirubin, SGOT, SGPT, and prothromb-in time were normal. Electrocardiograph, chest radiograph and upper gastrointestinal barium series were normal. Endoscopy revealed the eso-
phagus to be normal. No varices were appreciated, but the stomach was full of altered blood and no source of the bleeding could be located.

The patient on the fourth day after admission developed massive hema-
temesis and was given a total of 13 bottles of fresh blood. A Sengstaken tube was also passed, but it did not stop the bleeding. The patient kept deteriorating and thus an emergency exploratory laparotomy was done.

On opening the peritoneal cavity, there were signs of old generalized peritonitis. Mesocolon was edematous with small multiple paracolic abscesses. Spleen was large and soft. There was a mass in the lesser sac arising from the pancreas (Fig. 1).

![Fig. 1. Schematic diagram showing bleeding from pseudocystic mass in the lesser sac communicating with duct of Wirsung.](image)

On opening the stomach through a gastrotomy, it was found to be full of blood. Visualization of the esophagus through a cystoscope again did not reveal any varices, neither did the stomach or duodenum reveal any source of bleeding. However, blood was seen welling out of the duodenum. The mass in the lesser sac was felt through the posterior wall of the stomach and was found to be pulsatile. Aspiration showed it to contain blood under positive pressure. The patient expired 16 hours after the operation.
At autopsy, the body and the tail of the pancreas were found to be boggy and nodular. On compressing the mass in the lesser sac blood was seen coming out of the ampulla of Vater. On further dissection, the duct of Wirsung was seen to be markedly dilated and filled with blood. It communicated directly with multiple cystic cavities in the body and tail of pancreas containing altered blood.

COMMENTS

Bleeding from pseudocyst is a serious complication with 60% mortality (4). In one half of the cases of hemorrhage, in which bleeding occurs into the cyst, it arises from multiple bleeding sites in the cyst wall (5, 6). In the other half of cases it arises from a major artery, which is eroded by the basic autodigestive process associated with pancreatitis (5, 6). In this way a pseudocyst gets converted into a pseudaneurysm (5). Blood may reach the gastrointestinal tract via the pancreatic duct or as a result of an enteric fistula communicating with the cyst. Fistula develops secondary to pressure necrosis of the bowel wall by the contents of the pseudocyst (6).

Winship in his review article on Pancreatic Pseudocyst collected 1145 cases of pseudocyst which underwent some form of surgery, in addition to many others, which were managed medically (3). However only in 2 cases pseudocyst developed into a pseudaneurysm (3, 5). Sankaran and Walt in their review of 131 cases of pseudocyst described 18 cases which bled from pancreatic pseudocyst (4). None of them have been reported as having developed into a pseudoaneurysm.

In the present case antemortem diagnosis was not correctly made because of atypical clinical features and absence of a pulsatile mass. This is consistent with the observations of many authors (1-3). Even an endoscopy done within 24 hours of the fresh bleed failed to reveal the source of bleeding. Patient succumbed to his illness, but autopsy was the eye opener.

REFERENCES