Case report

Dysphagia due to pancreatic pseudocyst with mediastinal extension

Zbigniew Obuszko, David Beggs *
Department of Cardiothoracic Surgery, Nottingham City Hospital, Hucknall Road Nottingham NG5 1PB UK

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Abstract

This case report describes a patient who presented with severe dysphagia, found to be due to a large pancreatic pseudocyst extending into the mediastinum. The patient was successfully treated by cystgastrostomy. © 1998 Elsevier Science B.V. All rights reserved.

Keywords: Pancreatic pseudocyst; Cystogastrostomy

1. Introduction

A pancreatic pseudocyst is a collection of fluid in the lesser sac which occurs most frequently as a result of chronic or acute inflammation of the pancreas, or from injury. The most common presenting symptoms are chest or abdominal pain, weight loss and dyspnoea, however, unusual presentations such as abdominal pain and bilateral pitting oedema of the lower extremities due to compression of inferior vena cava have been described [1].

2. Case report

A 67-year-old man was admitted as an emergency with a 4-week history of severe dysphagia and epigastric pain with regurgitation of injected food and drink. His past medical history included obstructive airways disease and mild cardiac failure. Although in the past he had been a heavy smoker his alcohol consumption was less than 7 U/week.

On examination he was pale, hypovolaemic and had epigastric tenderness. Blood tests on admission confirmed mild anaemia, and an amylase of 202 U/l (in the range: 20–85 U/l).

Chest X-ray (Fig. 1.) demonstrated patchy consolidation in the right mid and lower zones, interpreted as possible infection, and a mass in the lower mediastinum suggestive of a paraoesophageal hiatus hernia.

Oesophago-gastroscopy performed to demonstrate the cause of his dysphagia, showed slight reddening of the lower oesophagus, and extrinsic compression of the posterior aspect of the stomach.

A CT scan (Fig. 2) demonstrated a large fluid filled structure lying in the lower posterior mediastinum, extending through the oesophageal hiatus into the upper abdomen. This appeared to be displacing the heart and compressing the lower oesophagus. The differential diagnosis lay between pancreatic pseudocyst and gastric volvulus. An ultrasound did not clarify the situation.

Laparotomy confirmed the presence of a large pancreatic pseudocyst extending into the mediastinum and causing compression of the lower oesophagus. An anterior gastrostomy was performed, through which the cyst wall was sutured to the posterior gastric wall prior to opening and draining the pseudocyst through the posterior gastric wall. Digital exploration of the cyst
cavity confirmed its extension through the hiatus into the mediastinum. The anterior wall of the stomach was then repaired in two layers. Relief of dysphagia was almost instantaneous and complete and the patient was discharged home after 3 weeks.

Subsequent chest X-rays and repeat ultrasound ultrasound demonstrated slow but complete resolution of the pseudocyst and its disappearance from the posterior mediastinum. The patient remains free of symptoms 18 months after surgery.

Fig. 1. Chest radiograph showing mediastinal mass.

Fig. 2. CT scan of upper abdomen demonstrating the mass extending intra-abdominally.
3. Discussion

Pancreatic pseudocysts have been reported in patients aged 7 months to 73 years. The most common cause in adults is alcoholic pancreatitis (75–90%) and in children it is trauma [2]. Lewis et al. reported up to 20% occurrence of pancreatic pseudocyst following pancreatic injury [3].

In most patients, physical examination is unremarkable, demonstrating only abdominal tenderness. Chest X-rays may show a pleural effusion in about 53% of patients and the serum amylase is elevated in about 60%.

Ultrasound and CT deliver the most exact information facilitating diagnosis. Untreated pancreatic pseudocysts are associated with various complications, the most serious of which are haemorrhage into the cyst, infection, and obstruction of duodenum or rarely, of the common bile duct [4]. Although there are reports of successful treatment of patients with ruptured pseudocysts withOctreotide [4], the usual treatment for a pancreatic pseudocyst which has not ruptured is drainage by surgery, endoscopy or the percutaneous route.

Some authors [5] report successful drainage of traumatic pancreatic pseudocyst, performed with side viewing duodenoscope and needle knife papillotome. In other centres [6,7] good results have been achieved following percutaneous cystogastrostomy utilising double pigtail catheter or definitive cystogastrostomy catheter. It is likely however that laparotomy is still the optimal way to manage pancreatic pseudocyst both because of its low morbidity and recurrence rate. In this case, the diagnosis was uncertain until laparotomy was performed. The patient was explored by laparotomy in preference to a thoracotomy as the pathology appeared to arise from the abdomen on CT. However, the chest was prepared in case thoracolaparotomy was needed.

References