

# Abdominal pancreatic pseudocyst – an unusual cause of dysphagia

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**Summary:** A 44 year old man with a long history of alcohol abuse developed progressive dysphagia. Radiological investigation revealed a pancreatic pseudocyst. Following percutaneous drainage the dysphagia resolved.

## Introduction

Pancreatic pseudocysts generally present with abdominal pain, weight loss or continuing fever following an episode of acute pancreatitis.<sup>1</sup> Although typically confined to the abdomen there are a few reports of extension into the mediastinum.<sup>2–4</sup> In such cases radiological evidence of oesophageal compression is not uncommon; dysphagia however is rare. We describe a patient with a pancreatic pseudocyst who presented with dysphagia alone.

## Case report

A 40 year old male, with a 20-year history of alcohol abuse, presented with intermittent dysphagia and weight loss of 10 kg over 3 months. The level of the dysphagia was mid-sternal, and associated with effortless reflux. Apart from longstanding dyspepsia there was no relevant medical history.

On examination there was mild proximal muscle wasting, but no stigmata of chronic liver disease. The upper abdomen was moderately distended, but without organomegaly or ascites.

Investigations showed a normal full blood count, apart from a macrocytosis of 100 fl (normal 77–96). Serum creatinine, urea, electrolytes, bilirubin, aspartate aminotransferase and alkaline phosphatase were all within normal range; gamma glutaryl transferase 81 U/l (normal less than 31 U/l); serum amylase 634 U/l (normal less than 340 U/l); ESR 24 mm in the first hour. Chest X-ray showed a small left sided pleural effusion. Barium swallow showed features suggestive of extrinsic compression at the gastro-oesophageal junction. Thoracic and abdominal computerized axial tomography (CT) (Figure 1) revealed

dilatation, in excess of 6 cm, of the lower two-thirds of the oesophagus, and a large cystic mass in the region of the tail of the pancreas and left upper quadrant, with anterior displacement of the stomach. Abdominal ultrasound examination confirmed the presence of a cyst, 7 cm × 7 cm × 9 cm in diameter, lying posterior to the stomach and left lobe of the liver.

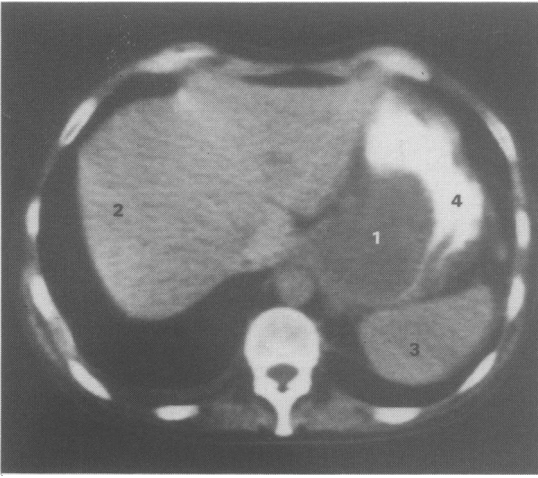
The cyst was aspirated percutaneously, and 150 ml of gelatinous altered blood removed, with an amylase concentration of 25,600 U/l. The cyst was therefore confirmed to be a pancreatic pseudocyst.

Twelve hours after aspiration the dysphagia had resolved completely, but the patient developed pain and guarding in the left flank, associated with a low grade pyrexia. The pain gradually resolved over 3 days, during which the haemoglobin fell by 6 g to 9 g/dl. The patient did not become shocked and blood was replaced by transfusion. A further abdominal ultrasound examination, 4 days following cyst aspiration, showed a large collection of fluid in the left flank, and almost complete resolution of the cyst, suggesting that it had drained into the retroperitoneum. Despite further ultrasound and CT examinations, which showed reaccumulation of the cyst, the patient's condition improved without further therapy. One year later he remains symptom free and has gained weight, although repeat ultrasound examination shows that the cyst is still present and has not changed size.

## Discussion

Pancreatic pseudocysts typically develop after an episode of acute pancreatitis, and although usually confined to the abdomen, have occasionally been found in the mediastinum, neck and pelvis.<sup>5,6</sup> Dysphagia alone is a rare presentation, and only two such cases have been reported,<sup>7,8</sup> although a further two patients have been described who presented with

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**Figure 1** CT scan of upper abdomen showing: 1 – pancreatic pseudocyst; 2 – liver; 3 – spleen; 4 – stomach containing gastrografin.

dysphagia associated with more recognized symptoms of pancreatic pseudocyst.<sup>4,6</sup> Uniquely, our patient's pseudocyst was confined to the abdomen, whereas in previous reports the dysphagia was due to mediastinal

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extension of the cyst, causing extrinsic oesophageal compression. As our patient's symptoms resolved after cyst drainage it is likely that the cyst was causing dysphagia by displacing the stomach anteriorly.

Pancreatic pseudocysts may be treated expectantly, as many resolve spontaneously, or by percutaneous or open drainage.<sup>9</sup> Although open drainage is associated with lower recurrence rates than percutaneous drainage the operation carries a significant mortality.<sup>9</sup> As this patient was a longstanding alcoholic and had undergone significant weight loss, it was felt that percutaneous drainage was the safest option.

It has been advocated that pancreatic pseudocysts should be treated by early drainage, to avoid the complications of cyst rupture, or infection,<sup>1</sup> although infection is rare. The likelihood of such complications diminishes with time because the cyst wall thickens. As our patient had dysphagia of 3 months duration, it was likely that the cyst wall had become sufficiently thick to make rupture improbable. As the dysphagia resolved after percutaneous drainage, he was thereafter managed conservatively.

This report is of interest because it describes a rare presentation of a pancreatic pseudocyst and a rare cause of dysphagia. Furthermore it illustrates the range of radiological techniques which are of value in the diagnosis and treatment of this condition.