Chronic pancreatitis: diagnosis and management of complications

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This is an introduction to the Gut tutorial "Chronic pancreatitis: diagnosis and management of complications" hosted on BMJ Learning—the best available learning website for medical professionals, from the BMJ Group.

Chronic pancreatitis is a progressive inflammatory condition that leads to irreversible loss of pancreatic structure and function. Eighty percent of cases are due to alcohol misuse. Chronic pancreatitis usually presents with abdominal pain, followed at a variable interval by the features of exocrine and endocrine dysfunction. Clinically significant nutritional deficiencies are not evident until 90% of exocrine function is lost. The majority of pancreatic function tests have a low sensitivity in early disease. In addition to pain, malabsorption and diabetes, chronic pancreatitis has a number of local complications including pseudocyst formation, biliary and duodenal obstruction, venous thrombosis and formation of pseudoaneurysm. Chronic pancreatitis has also been reported to be an independent risk factor for the development of pancreatic cancer, with a cumulative risk of 4% after 20 years of disease, regardless of cause. There is still too often an assumption that little can be done other than to provide analgesia and encouragement to avoid alcohol. Endoscopic cyst puncture is increasingly guided by endoscopic ultrasound and is technically successful in 80–95% of patients. Surgery for a pancreatic pseudocyst is indicated in the presence of varices and venous thrombosis, situations in which endoscopic drainage may be difficult or impossible. Persistent or progressive biliary stricturing, particularly in the presence of recurrent cholangitis, and the development of secondary biliary cirrhosis is an indication for surgical bypass. Hepatic fibrosis may be reversible following biliary drainage in such patients.

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EDITOR'S QUIZ: GI SNAPSHOT

Acute liver failure in a patient with lung cancer

Robert Spiller, *editor*

Clinical presentation

A 63-year-old man with locally advanced non-small-cell lung cancer presented with dyspnoea, cough and pleuritic chest pain. Examination revealed fever and dehydration with normal cardiovascular, chest and abdominal examination.

Investigations: Alanine aminotransferase level 2760 IU/l, total bilirubin 25 μ mol/l, alkaline phosphatase 188 IU/l, albumin 39 g/l, γ -glutamyl transferase 318 U/l, international normalised ratio 2.0, creatinine 205 μ mol/l, white cell count 13.1×10^9 /l. Screening for causes of acute hepatitis was negative, including hepatitis A, B, C serology, paracetamol level and autoimmune profile. Chest radiograph showed right pleural effusion (fig 1). Electrocardiogram was normal.

Liver and renal function progressively deteriorated (alanine transferase 4000 IU/l, total bilirubin 30 μ mol/l, international normalised ratio 3.9, creatine 240 μ mol/l). By day three of admission, he developed encephalopathy (asterix), oliguric renal failure and a metabolic acidosis (pH 7.36, lactate 6.0 mmol/l). Doppler ultrasound scan of the liver showed normal portal veins but dilated hepatic veins. He then developed hypotension and tachycardia, and was noted to have marked periorbital oedema. An urgent echocardiogram was performed (fig 2).

Questions

1. What is the diagnosis?
2. How would you manage this patient?

See page 1209 for answer

This case is submitted by:

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Figure 1 Chest radiograph. Note right pleural effusion.

Figure 2 Echocardiogram.