Mediastinal mass

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Abscess, mediastinal, pancreatitis, pseudocyst

CASE REPORT

A 59-year-old man with a medical history of alcoholic pancreatitis was admitted with acute pancreatitis. To exclude a biliary origin he underwent an endoscopic retrograde cholangiopancreatography (ERCP) combined with papillotomy. The ERCP did not reveal an explanation for his pancreatitis. His condition subsequently failed to improve; ventilatory support and vasoactive medication were needed in the presence of a pneumonia of the right lower lobe. The CT scan of his abdomen showed a collection of fluid in his abdomen. The aspirate of this fluid contained leucocytes and Enterococcus faecalis, so the abscess was drained and he was treated with meropenem. Because his fever persisted and his condition did not improve he was transferred to our ICU. On arrival to the ICU he was ventilated and started on a mild dose of vasopressors (norepinephrine 0.2 \( \mu \)g/kg BW/h). Lab results showed leucocytes of 9.7 \( \times \) 10^9 /l and amylase 796 U/l.

The chest radiograph now revealed a mediastinal mass (figure 1).

Figure 1 Anteroposterior chest radiograph of patient showing the presence of mediastinal mass

WHAT IS YOUR DIAGNOSIS?

See page 417 for the answer to this photo quiz.
DIAGNOSIS
The computed tomography (figure 2) shows a collection of fluid in the right posterior mediastinum consistent with a mediastinal pancreatic pseudocyst. The cystic mass presumably originates from the pancreatic region, and extends through the oesophageal hiatus in the diaphragm all the way up to the mid and upper thoracic region, as suggested by the scanogram (figure 3). The patient made a good recovery after drainage of the abdominal abscess. He was extubated and transferred to the surgical ward. Few days later his condition deteriorated again. A new CT scan now showed a reduction of the fluid in the abdomen, but the mediastinal fluid collection had increased in size and contrast enhancement of its wall suggested infection. Through a median upper abdomen laparotomy the mediastinal abscess was drained, and large amounts of pus could be evacuated; cultures grew Enterococcus spp. Thoracic involvement of pancreatitis includes adult respiratory distress syndrome (ARDS), pleural effusions, and mediastinal pseudocysts. Pseudocysts are reported to occur in 16 to 50% of cases of acute pancreatitis, and in 20 to 40% of cases of chronic pancreatitis. The most common cause of pancreatic pseudocysts is alcoholic pancreatitis (75 to 90%) in adults, and trauma in children. The associated symptoms of mediastinal pancreatic pseudocysts tend to be nonspecific, as in our case. Abdominal pain, nausea, vomiting, and chest, back and shoulder pain have been reported. Dysphagia, pleural effusion, spontaneous oesophageal fistulisation, and even congestive heart failure, palpitations and tamponade have been reported. Treatment options include octreotide, external drainage, surgical intervention, and transpapillary stent placement in case of communication.

REFERENCES