A rare acute thoracic manifestation of a chronic digestive disease: pancreaticopleural fistula

**Key words:** Pancreaticopleural fistula. Chronic pancreatitis.


**Dear Editor,**

A 58-year-old man presented to the Emergency Department with a 2-month history of dyspnea and left pleuritic pain. As past medical history, he reported drinking (100 g alcohol/day) and a smoking habit. His blood analysis were normal, except for elevated C-reactive protein (CRP) (9.8 mg/dl). A chest x-ray showed a left pleural effusion (Fig. 1A). Thoracentesis revealed an exudate, normal adenosine deaminase, amylase of 5,800 U/l, AARB-negative, negative microbiology culture and for malignant cells. The patient had a recurrence of left pleural effusion.

Regarding the suspicion of pancreaticopleural fistula (PPF), he underwent an endoscopic retrograde cholangiopancreatography (ERCP), immediately followed by thoracic-abdominal CT. Wirsungography showed dilation of the secondary branches in the pancreatic head, without progression of the wire beyond the head/body transition (Fig. 1B) or opacification of the proximal Wirsung. Injection of contrast at this level revealed an extra-pancreatic trajectory towards the left thorax into the pleural cavity (Fig. 1C). On CT, the contrast in the Wirsung (Fig. 1D) took an ascending path, dissecting peri-pancreatic adipose tissue (Fig. 1E, thin arrow), adjacent to stomach’s lesser curvature (Fig. 1E, thick arrow), entering the thorax through the esophageal hiatus and finishing in the left pleural cavity (Fig. 1F). For this reason endoscopic therapy was impossible. The magnetic resonance cholangiopancreatography (MRCP) confirmed these findings and showed chronic pancreatitis.

The patient was initially treated with octreotide (0.5 mg tid titrated to 1.5 mg tid) during three weeks and maintained oral feeding. As the fistula remained, he underwent a successful surgical closure.

**Discussion**

PPF is rare, presenting only in 0.4-7% of chronic pancreatitis (1). For a correct diagnosis, a high degree of suspicion is required (1,2). MRCP is the modality of choice (3), nevertheless its sensitivity is similar to ERCP (3), and if a CT scan is performed immediately after, as in our case, sensitivity increases (4).

The most consensual approach is starting with medical treatment (octreotide and endoscopic therapy) and complement it with surgical closure of the fistula (1-3) when there is no resolution in three weeks.

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**References**