Loculated hydrothorax: An unusual complication of hepatic cirrhosis

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INTRODUCTION

Ascites is the most common complication in hepatic cirrhosis and is a bad prognosis factor. Predominantly located in the abdomen, it can sometimes affect the thorax, representing a challenge to the physician when it presents with a peculiar morphology, such as loculated intrathoracic ascites.

CLINICAL CASE

A 67-year-old man with hepatic cirrhosis caused by alcoholism and with no cardiopulmonary history was admitted for symptoms of hepatic encephalopathy secondary to constipation. The chest X-ray showed a radio-opaque lesion, rounded with regular edges in the left hemithorax that was not present in previous check-ups (Fig. 1). Empirical antibiotic treatment was started due to suspected pneumonia. In the thorax CT, the collection showed smooth, regular edges and content with “water” density, suggesting the possibility of loculated intrathoracic ascites (Fig. 2). The patient’s symptoms rapidly improved, but the above lesion persisted on discharge, disappearing after a month of diuretic therapy (Fig. 3).

Fig. 1. Base of left hemithorax shows rounded radiopaque lesion, not observed in previous images.

Fig. 2. The arrows show a well-defined, hypodense, lobulated formation, approx. 14 x 10 cm in size on the axial plane, with fine septa and “water” density, suggestive of loculated intrathoracic ascites.
DISCUSSION

Hepatic hydrothorax or intrathoracic ascites is the pleural effusion in a patient with cirrhosis with no cardiopulmonary disease (1). Mainly located on the right side (2), it can appear loculated due to the existence of adherences or walls between both pleura, preventing the liquid from flowing to the adjoining areas. When present, it is important to consider the possibility of haemothorax or empyema as differential diagnoses. In our case the absence of respiratory clinical symptoms, the radiological characteristics of the lesion and the favourable development with diuretics confirmed the diagnosis. A chest CT is recommendable to rule out lung, mediastinal or pleural diseases and even a thoracentesis for suspected empyema or haemothorax. The treatment consists of diuretic treatment, thoracentesis or insertion of a TIPS if there is no response to medical treatment (3), even considering the possibility of medical procedures (4).

REFERENCES

Fig. 3. After a month, the above mentioned lesion was no longer observed.