

PICTURES IN DIGESTIVE PATHOLOGY

A bronchobiliary fistula due to a giant hydatid cyst

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CASE REPORT

A 55-year-old female patient presented to the outpatient clinic due to chronic cough and bilioptysis with hydatid debris expectoration during previous two months duration. Physical examination revealed a decrease in breath sounds in the right chest and palpable hepatomegaly. An indirect hemagglutination test was positive for anti-*Echinococcus* antibodies. A chest X-ray showed an elevation of the right diaphragm and right lower lobe opacity due to the intrathoracic component of the hydatid cyst (Fig. 1). An abdominal magnetic resonance imaging test showed a giant multiseptated hepatic cyst which was consistent with a hydatid cyst type CE 2 based on the World Health Organization (WHO) classification, which communicated with the biliary tree (Fig. 2) with massive extension to the right hemithorax (Fig. 3).

The patient was given 400 mg of albendazole every 12 hours and underwent abdominal surgery, which consisted

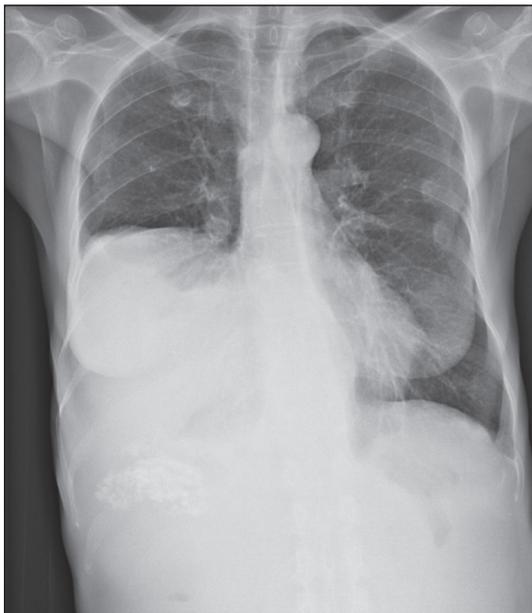


Fig. 1. Chest X-ray showing an elevation of right diaphragm and the right lower lobe opacity due to the intrathoracic component of the hydatid cyst.

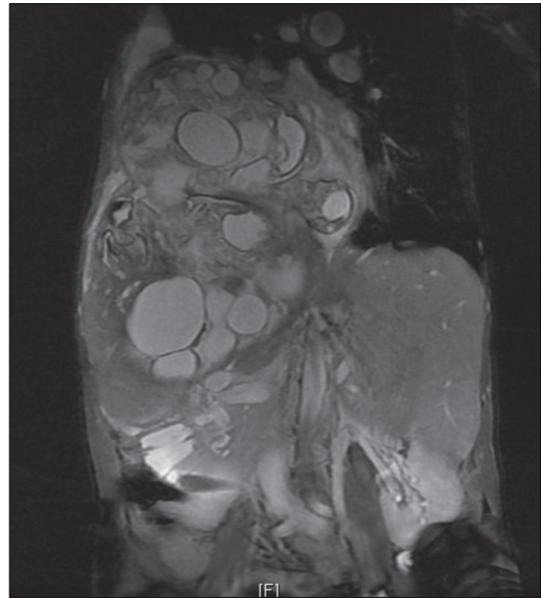


Fig. 2. Magnetic resonance cholangiography showing the communication of the hydatid cyst with the biliary tree.



Fig. 3. Coronal section of a magnetic resonance image showing the massive intrahepatic and intrathoracic component of the hydatid cyst.

of a pericystectomy of the giant hydatid cyst with evacuation of cyst debris from the bile duct, closure of hepatobronchial fistula, and repair of the diaphragm.

DISCUSSION

Intrathoracic rupture of a hydatid cyst of the liver is a rare but severe complication of echinococcal disease with an incidence of around 1% and a mortality rate of approximately 10% (1). Early diagnosis and management of septic associated complications are essential (2). Surgery represents the definitive treatment with four main goals: treating the hydatid disease, assuring a free drainage of bile through the common bile duct, and closure of the hepatodiaphragmatic

communication and of the tracheobronchial fistula (3). In cases of a simultaneous rupture of the cyst into the lung and the biliary tree, the evacuation of cyst debris from the bile duct takes priority over other surgical interventions.

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