



Biliopleural fistula of a large retroperitoneal hydatid cyst

To the Editor,

Hydatid disease remains a common health problem in endemic countries (1). Rupture of the biliary tree is the most common complication of the liver hydatid cyst. In contrast, biliopleural fistula and retroperitoneal inoculation are the unusual complications, and these complications have never been reported simultaneously in the same case. We present an infrequent case of a large liver hydatid cyst complicated with both biliopleural fistula and retroperitoneal inoculation.

A 29-year-old woman was admitted with gradually increasing dyspnea and a history of right flank and abdominal pain during the previous 6 months. In the abdominal examination, hepatomegaly was observed. On pulmonary auscultation, there were no breath sounds on or the basal and middle zones of the right lung. The laboratory tests were as follows: white blood cell count, 15600 cells/mm³ and direct bilirubin, 0.50 g/dL. Chest radiography showed opacity in the right lower lobe. Abdominal ultrasonography revealed a 20×15-cm mass on the right hepatic lobe, which had cystic and hyper-echogenic components involving millimetric calcifications (Gharbi stage 3). Abdominal computed tomography showed a lesion with cysts, which was from the right liver lobe, extending below to the right iliopsoas muscle (Figure 1). Moreover, the right biliopleural fistula of the hydatid cyst was observed (Figure 2). The Indirect hemagglutination test for the hydatid cyst was 1:1280 titer positive. Abdominal exploration showed that the mass was adherent to the right diaphragm. Cystotomy was performed, and 1400 cc of cystic fluid and 100-150 daughter vesicles were extracted. Next, a retroperitoneal exploration was performed. There were cystic fluid and daughter vesicles in the retroperitoneal region and scrubbed retroperitoneal region. Because of persistent pleural effusion, endoscopic retrograde cholangiopancreatography was performed. It showed contrast leak-



Figure 1. Abdominal computed tomography revealed a giant retroperitoneal hudatid cyst.

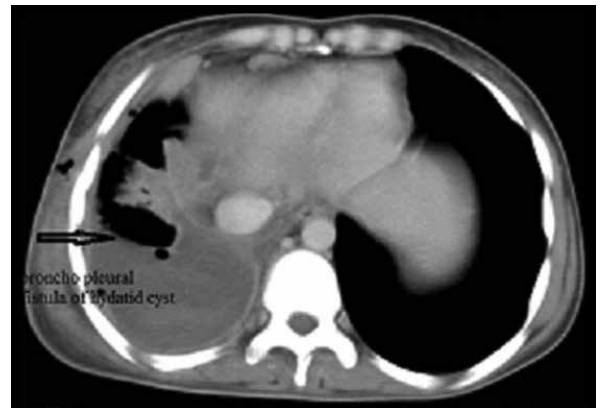


Figure 2. Abdominal CT revealed right bronchopleural fistula.

age from the left intrahepatic biliary tree to the chest cavity. A nasobiliary drainage catheter was inserted. Thereafter, pleural effusion gradually decreased. Bile drainage was stopped at the 11th postoperative day. Control cholangiography revealed no leakage to the chest cavity. The patient was discharged from the hospital and appeared healthy at the 3-month follow-up.

The hydatid cyst rarely fistulizes to the pleural cavity and results in retroperitoneal inoculation. The placement and size of the cyst are important factors related with

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those complications. A large cyst can increase the pressure on the diaphragm and cause the thinning of the diaphragmatic fibers; consequently, a rupture in pleural cavity may occur (2). In our case, the fistula probably occurred because of the large size and location of the cyst in the liver.

The retroperitoneal hydatid cyst is generally secondary to rupture or surgical inoculation of a hepatic cyst (3). Assessment using clinical, radiological, and serological analyses can ease its diagnosis. However, surgery and pathological examination are essential for the accurate diagnosis.

In conclusion, although hydatidosis is a benign disease, it may result in serious complications. To the best of our knowledge, this is the first report of a huge liver hydatid cyst complicated with both biliopleural fistula and retroperitoneal inoculation.

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