Letters to the Editor

Giant hepatic hydatid cyst with mediastinal extension

Dear Editor,

Echinococcosis is a zoonosis caused by Echinococcus granulosus tapeworm larvae. It is endemic in the Mediterranean countries, Middle East and South America (1). The liver is the organ most frequently affected (50-70%), followed by the lungs (25-30%) (2). Hepatic hydatidosis is frequently characterized by insidious symptoms and diagnosis is often difficult (3).

We report an unusual case of giant hydatid cyst (HC), which grew exophytically from the left hepatic lobe to the mediastinum, where it caused compression of various anatomical structures.

Case report

A 60-year-old male with no past medical history presented with few days of epigastric discomfort, jaundice, dark urine and acholic stools. Physical examination revealed only jaundice. Laboratory values showed AST 57 IU/L, ALT 172 IU/L, GGT 564 IU/L, ALP 272 IU/L, total bilirubin 8.15 mg/dL, direct bilirubin 5.72 mg/dL. Positive serology for hydatidosis. CT scan (Fig. 1 A, B and C) showed a large cystic mass of 20 x 10 x 12 cm in the left hepatic lobe, with vesicles inside, compressing the inferior vena cava and extending through the hiatus into the mediastinum, displacing descending aorta, esophagus, and right atrium. He was treated with albendazole for four weeks and subsequently underwent surgery (Fig. 1D). Through a midline laparotomy, a puncture-aspiration of the cyst, sterilization with hypertonic saline solution and partial pericystectomy with residual cavity drainage were performed. Biopsy confirmed the hydatid nature of the cyst. The patient had an uncomplicated recovery and was discharged on the seventh postoperative day on a therapeutic regimen of albendazol.

Discussion

The diagnosis of hepatic hydatidosis is usually casual or may be made after intra and extrahepatic complications (4). Clinical

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Fig. 1. A-C. Abdominal and pelvic CT with intravenous contrast (slices of 5 mm) in which is identified a cystic mass, with daughter vesicles, in the left hepatic lobe extending to the mediastinum. A. CT (coronal section): compression of the inferior vena cava. B. CT (sagittal section): atrial compression by transhiatal cystic growth. C. CT (axial section): cystic lesion of 20 x 10 cm. D. Inner aspect of the cyst after its opening.
manifestations depend on the topography and the size of the lesion. Giants HC are extremely rare and symptoms are noted when their diameter reaches 10 cm (5).

The combination of imaging and serology usually enables diagnosis. Ultrasonography has a high diagnostic sensitivity (90-95%), and it is important to follow-up (6). CT scan is the imaging modality of choice to determine the presence of complications. This technique is useful for detection of extra-abdominal locations and for surgical planning (4).

Currently, therapeutic options in hydatid liver disease include medical treatment, percutaneous aspiration and drainage, and open or laparoscopic surgery (7). Chemotherapy is the preferred treatment when the disease is inoperable or when the cysts are too numerous. This treatment is also applied in combination with surgery as prophylaxis against the spread of cystic content and to minimize the recurrence of cysts. Surgery still remains as the standard for liver HC treatment because completely eliminates the parasite, treat complications associated and prevent recurrences (8).

In the particular case reported, it is remarkable the large size of the cyst and that it was not originated in the right lobe, as usual (10), but it was located in the left lobe, involving the mediastinum. Therefore, it should be noted that in the presence of a mediastinal mass of possible abdominal origin, liver hydatidosis should be included in the differential diagnosis.

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References

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