Hepatobiliary and pancreatic: A young woman with mild right upper quadrant pain

A 40-year-old woman presented with a history of mild, dull, aching right upper quadrant pain for the last 6 months, which was not associated with fever, jaundice or weight loss. Physical examination was unremarkable except for mild hepatosplenomegaly. Her routine haemogram was normal. Serum alanine aminotransferase was 45 IU/L (normal < 40 IU/L), aspartate aminotransferase was 82 IU/L (normal < 40 IU/L) and serum alkaline phosphatase level 199 IU/L (normal < 125 IU/L). She tested negative for hepatitis B surface antigen and for antibody to hepatitis C virus. Subsequently, an ultrasound and a computed tomography (CT) scan of the abdomen were performed.

![Ultrasound](image1)

Figure 1 Ultrasound.

![Computed tomography scan](image2)

Figure 2 Computed tomography scan.

1. What is your diagnosis?
2. Identify the abnormal imaging feature shown in the pictures.

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Contributions to the hepatobiliary and pancreatic images section are welcomed and should be sent to the Editorial Office, 54 University Street, Carlton South, Vic 3053, Australia.

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IMAGES OF INTEREST

Hepatobiliary and pancreatic: Commentary

INTERPRETATION OF THE IMAGING LESION

The ultrasonographic picture shows a large cystic lesion in the liver in which an echogenic curvilinear structure (arrows) is seen. This does not move with change of posture. The computed tomography scan also shows the same features. This has classically been described in liver hydatidosis as 'concealed waterlily' sign.1

DIAGNOSIS: HYDATID CYST OF THE LIVER

Hydatid cyst of the liver is caused by Echinococcus granulosus. The liver is the most frequent site of involvement accounting for 50–60% of cases of cystic echinococcosis. The diagnosis of liver hydatidosis is based on typical ultrasonographic features. The various sonographic features are solitary univesicular or multivesicular cyst, solid echogenic mass, multiple cysts or collapsed, flattened and calcified cysts.2 The recently described waterlily sign, which is shown in the pictures (arrows) results from entrapment of an intact fold of germinal layer in the viscid matrix of the hydatid cyst.1

The mainstay of treatment is surgery.2 Percutaneous aspiration and injection of scolicidal agents into the cyst is an alternative treatment. Other causes of cystic lesions in the liver include solitary or multiple congenital cysts and Caroli's disease.

REFERENCES