Photoclinic

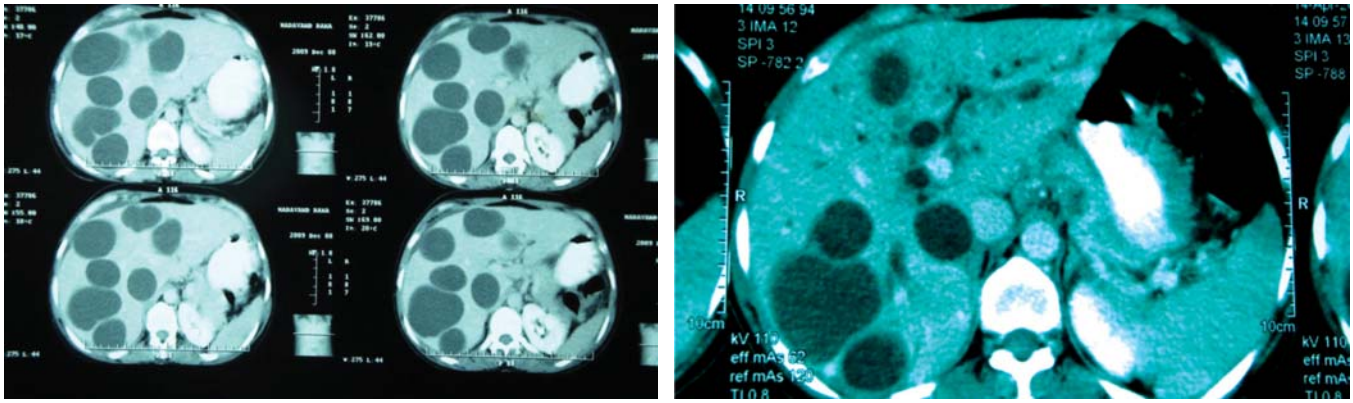

Figure 1. Trans-abdominal CT scans showing numerous cysts in the liver and mild dilation of the intrahepatic bile ducts.

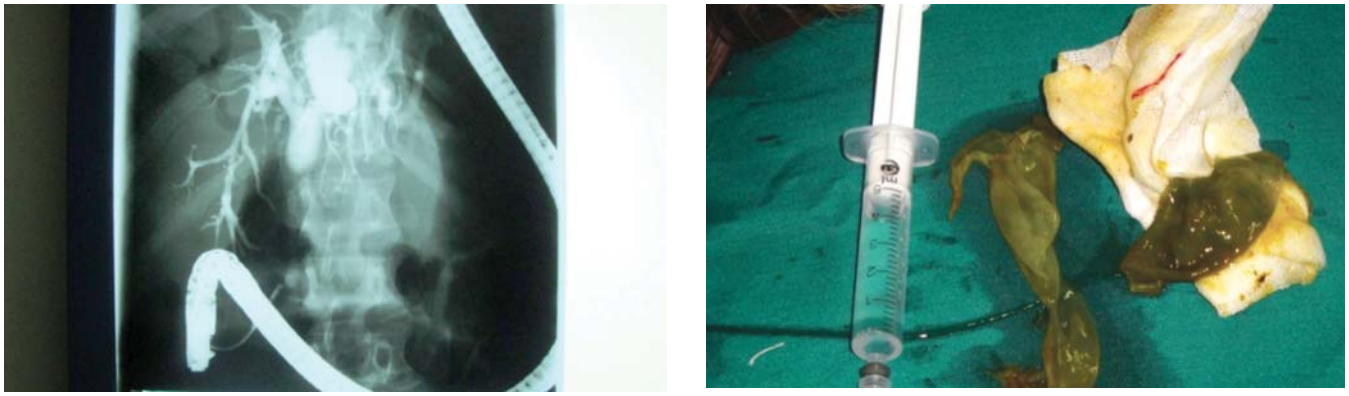

Figure 2. Endoscopic retrograde cholangiopancreatography (ERCP) images. Irregular long filling defect in the common bile duct (CBD; left image). After sphincterotomy, two large segments (6×7and 8×9 cm) of bile-stained thin membranous tissue were removed from the ampulla by basket.

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A 46-year-old Iranian housewife was seen in the Emergency Department due to severe epigastric and RUQ pain that radiated to her right shoulder. Her pain was associated with frequent vomiting, fever, chills and jaundice.

On admission she was dehydrated and icteric but conscious. Blood pressure was 90/60 mm Hg, pulse rate was 110 beats per minute and temperature was 39°C. Upon physical examination, Murphy's sign was negative but there was epigastric and RUQ tenderness. The patient's laboratory findings are listed in Table 1. Because of her past medical history (several intermittent periods of fever, abdominal pain and jaundice during the past one year) and present clinical manifestations, a diagnosis of cholangitis was made and intravenous fluids, ceftriaxone and metronidazole were prescribed.

Trans-abdominal ultrasound was remarkable for several cysts without internal septa in the right and left lobes of the liver, dilation of the intra-hepatic bile ducts and mild hepatomegaly. There were cysts, 3 – 9 cm in diameter. Port diameter was 9 mm, however it was not possible to evaluate the common bile duct (CBD). CT scan confirmed the ultrasound findings and also revealed a 3-cm cavity at the base of the left lung, with a CBD diameter of 10 mm (Figure 1). Other organs such as the gallbladder, spleen, pancreas, kidneys and pelvic organs were normal. Endoscopic ultrasonography was performed to further evaluate the biliary system, which revealed sludge and debris in a dilated 12-mm CBD in addition to the presence of gallbladder sludge. After three days of antibiotic therapy, the patient's condition remained unchanged; the fever continued and serum bilirubin level rose.

The patient underwent an endoscopic retrograde cholangiopancreatography (ERCP) for sphincterotomy. The ampulla of Vater appeared normal in duodenoscopy but the cholangiogram revealed an irregular long filling defect in the CBD (Figure 2, top left image). After sphincterotomy, two large segments (6 × 7 and 8 × 9 cm) of a bile-stained, thin membranous tissue were removed through the ampulla by basket. The following day, the patient's condition improved and she was afebrile. Serum bilirubin levels returned to the normal range after one week.

What is your diagnosis?
See the next page

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Photoclinic Diagnosis: **Histopathologic assessment of the retrieved samples confirmed hydatidosis.**

Table 1. Patient's laboratory findings.

Parameters	Patient	Normal
White Blood Cell (/milimeter^3)	10.5×10^3	3.54–9.06 x 10^3
Polymorphonuclear	55%	40–70%
Lymphocyte	40%	20–50%
Eosinophile	2%	0–6%
Haemoglubine (gram/deciliter)	10.8	13.3–16.2
Platelet(/milimeter^3)	385×10^3	$165–415\times10^3$
Erythrocyte Sedimentation Rate (milimeter/hour)	120	0–20
Prothrombin Time (second)	12	12.7–15.4
Partial Tthromboplastin Time (second)	30	26.3–39.4
SGOT(Unite/Liter)	81	7–41
SGPT(Unite/Liter)	160	7–41
Alkaline phosphatase (Unite/Liter)	1822	33–96
Total Bilirubin:(miligram/deciliter)	20	0.3–1.3
Direct Bilirubine: (miligram/deciliter)	11.5	≤0.3
Blood culture	Negative	Negative
Ant-echinococus Ab	5	Negative to <1
C-ANCA	Negative	Negative
P-ANCA	Negative	Negative
Creatinine (miligram/deciliter)	0.8	0.5–0.9 (female)
Blood Urea Nitrogen (miligram/deciliter)	12	7–20
Fasting Blood Sugare (miligram/deciliter)	76	75–110
Bilirobinurea	2+	Negative

SGOT: serum glutamic oxaloacetic transaminase
SGPT: serum glutamic pyruvic transaminase
C-ANCA: Cytoplasmic Antinutrophil Cytoplasmic Antibody
P-ANCA: Perinuclear Antinutrophil Cytoplasmic Antibody

Hydatid cyst disease is a common parasitic infection of humans and animals in some parts of the world. Humans become infected by consuming parasite eggs through contaminated vegetables. Liver involvement, which is the most common (70%) manifestation of this parasitic infection is often asymptomatic,[1] but septic cholangitis may occur occasionally.[2] Obstructive jaundice is noted in 25% of liver hydatid disease due to cyst progression into the CBD.[3] Ultrasonography or CT scans can detect 25% of CBD parasitosis but ERCP in this setting is diagnostic in 60% of cases.[4,5] During ERCP, the CBD hydatid cyst is removed by a basket or extraction balloon. CBD irrigation with saline is useful to wash out additional daughter cysts.[6]

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