

OBSTRUCTIVE JAUNDICE DUE TO HYDATID CYST IN A RARE LOCATION*

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Key words : hydatid cyst, jaundice, obstruction, ultrasonography

Hydatid disease associated with obstructive jaundice is usually due to the rupture of a cyst into a biliary duct and occlusion of the duct by the cyst contents¹. Although hepatic and intraabdominal echinococcosis are recognized as a cause of obstructive jaundice, retroperitoneal hydatid cysts – which are mostly located in the pancreas – are quite rare^{2,3}. This paper presents a child with obstructive jaundice due to a hydatid cyst situated between the head of the pancreas and the curvature of the duodenum.

Case Report

A seven-year-old boy was admitted to Hacettepe Childrens Hospital with a history of abdominal distention and pain of a year's duration, also recurrent jaundice; an intraabdominal mass had been diagnosed. The boy had had attacks of pale stools and dark urine. There was jaundice, and the liver was palpable three centimeters below the costal margin, with no splenomegaly. A mass 5 cm in diameter was palpable in the right upper abdominal quadrant. There was bilirubinuria but no urobilinogen. The hemoglobin was 12,3 g/dl, the white blood cell count 6600/mm³ with no eosinophilia. Other investigations included serum total bilirubin 20,1 mg/dl, direct bilirubin 15,0 mg/dl, alkaline phosphatase 31,6 BU (normal 1,5-4,5 BU), SGOT 60 U (normal 0-50 U), SGPT 55 U (normal 0-40 U), prothrombin time 80 sec (normal 12 sec), partial thromboplastin time 300 sec (normal 12 sec). BUN, serum electrolytes, creatinine, uric acid, total protein and albumin values were normal. In an intravenous pyelogram, the left kidney was found to be larger than normal, and the renal pelvis and calices were also enlarged on the left side, whereas the right kidney and collecting system were normal. Gray-scale

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ultrasound demonstrated a dilated biliary tree which was obstructed by a cyst 8 cm in diameter (Figures 1,2). The liver scintigraph suggested there had been cirrhotic changes.

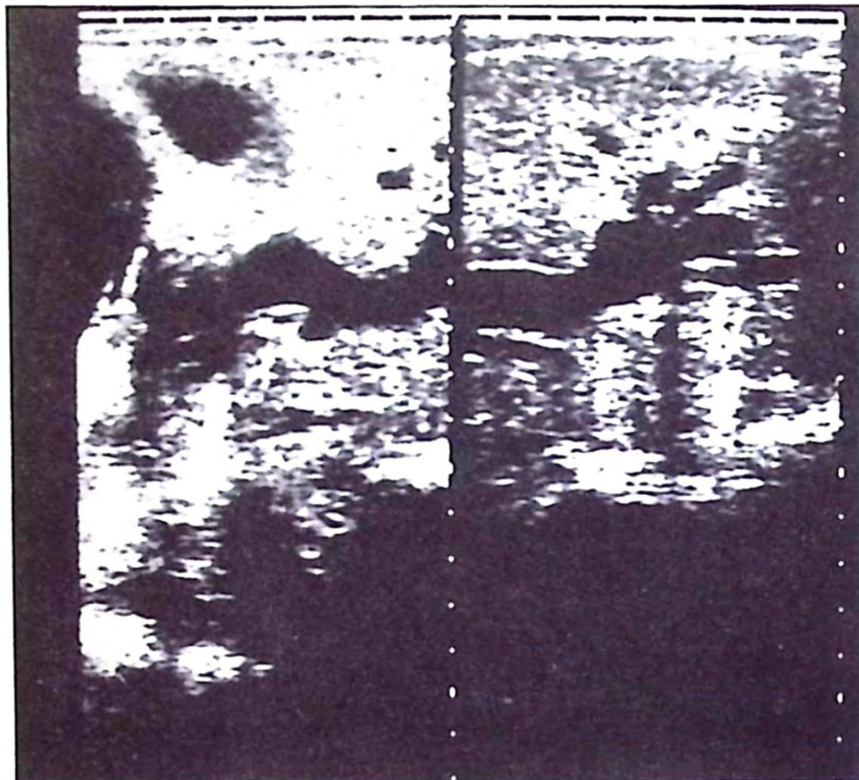


Figure 1
Dilatation of biliary tree was identified by ultrasonographic procedure.

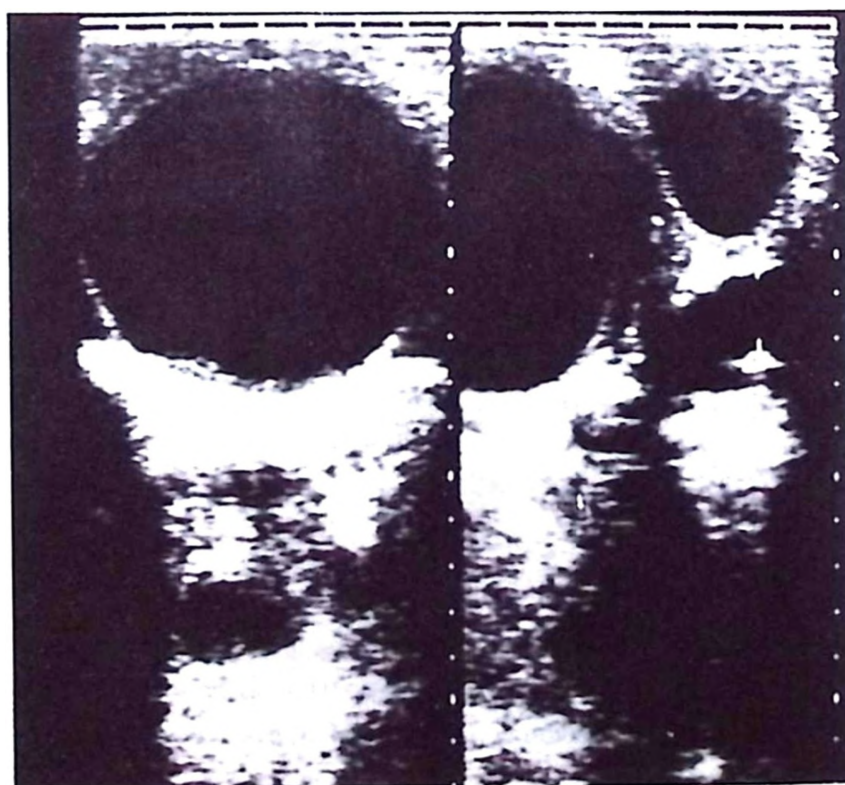


Figure 2
Visualization of the cyst in the abdomen was accomplished by ultrasonographic technique.

Laparotomy revealed a cystic mass 8 cm in diameter located between the head of the pancreas and the curvature of the duodenum. There were no other intra-abdominal masses and no cysts in the liver. Clear fluid was aspirated from the cyst. A partial cystectomy and omentopexy were performed, and a liver biopsy was taken. Histopathological examination confirmed the diagnosis of echinococcal disease and demonstrated both a PAS positive chitinous layer and a germinal layer with scoleces. The liver biopsy revealed secondary biliary cirrhosis. On the third day postoperatively, the jaundice disappeared, and total and direct bilirubin levels decreased to 5.3 mg/dl and 3.3 mg/dl, respectively. One month later the hepatomegaly remained unchanged; the patient has not returned again for control.

Discussion

Intra-abdominal masses can cause extrahepatic bile duct obstruction. The physical examination of our patient revealed a mass in the abdomen. Ultrasonography was used to identify the nature of the mass since this is a non-invasive method⁴. It showed a cystic lesion in the abdomen. Surgery in this case confirmed the preoperative diagnosis of obstructive jaundice.

Although cases of biliary tract obstruction due to hepatic cysts are frequently reported⁵, extrahepatic obstruction by a hydatid cyst, is rare³. In fact, as far as we know, no case of a hydatid cyst in this location has so far been reported. Most of the reported cases of extrahepatic biliary obstruction by a hydatid cyst have been in adults⁶, but in Turkey, where this disease is common, it is important to consider the possibility of a hydatid cyst in a jaundiced child with intra-abdominal mass.

Summary

The case of a child with obstructive jaundice due to a hydatid cyst is reported. The location of such a cyst between the head of the pancreas and the curvature of the duodenum has not previously been reported. The importance of considering the possibility of hydatid cyst disease in a jaundiced child with intra-abdominal mass is emphasized.

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