



Letter to the Editor

To the Editor: Cystic Echinococcus by Raymond A. Dieter, Jr., M.D.

In this issue of *International Surgery*, Dr. Milosevic and associates have presented a very unusual and difficult liver process to diagnose and treat - a patient with a hepatic alveolar lesion due to Echinococcal (E.) disease. Their patient developed jaundice and marked abdominal discomfort. Extensive diagnostic evaluation demonstrated biliary stasis and reactive hepatitis. MRI demonstrated a focal lesion involving the S5S8 segment of the liver characteristic of a cholangiocarcinoma. Hematology studies and total body scans led to operative intervention including a right extended hepatectomy. The lesion proved to be a very unusual multi-locular E. Cyst of the alveolar type. They concluded that one had to be aware of this potential lesion to order appropriate disease serologic testing.¹ We thought the following discussion regarding another type of E. disease might be of interest.

This report reminded me of a patient - from Italy treated by ourselves, in 1971 complaining of abdominal pain and a large mass in his abdomen. He related a past history of an E. Cyst of the abdomen which had ruptured eight years previously producing shock for which surgery was required. His abdomen was now markedly protuberant due to the huge cyst. Following evaluation, he had surgical exploration which demonstrated a giant E. Cyst of the liver in which a 12-inch ring forcep when inserted within would not touch any part of the inner cyst wall.

At surgery, after isolation of the lesion, the cyst was infused with 3% saline. After a 30-minute observation, the cyst was emptied of the now dead E. disease. Resection of the cyst and the remaining right lobe of the liver along with the gallbladder followed. Multiple omental E. cysts were also resected at this time. Several months

later - after surgical recovery, he again was returned to surgery for resection of several additional calcified intra-abdominal and retroperitoneal cysts. This gentleman had a normal chest x-ray with no pleural nor pulmonary pathology.

Hemagglutination studies demonstrated a 1 to 4,096 indirect hemagglutination and 1 to 1,280 bentonite flocculation serum study.² Because of these extremely high blood results, he became a national testing standard for E. disease. Periodically he would return to our office and have blood drawn as the national laboratory standard for comparison with other potentially E. infected patients. He then lived for over twenty years without additional abdominal surgery nor concerns regarding E. disease.

Echinococcosis (hydatid cyst) is caused by the tapeworm E. Granulosis found in certain animals, especially the canine, sheep, cattle, and certain other wild animals living about the Mediterranean and northern climates.³

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References

1. Milosevic M, Sarcev K, Zivojinov M, Milosevic Z, Lalosevic D, Torbica S, Ruzic M. Alveolar echinococcosis of the liver with initially suspected intrahepatic cholangiocarcinoma: case report - the significance of preoperative serological diagnostics. *International Surgery* 2024;108 (2):90-97
2. Brown HW. Metazoan infections: the Flatworms: Echinococcosis. Cecil RL and Loeb RF. A textbook of medicine. WB Saunders Company Philadelphia 1959; 387-389
3. Boyd W. Diseases caused by animal parasites a textbook of pathology. Chapter 8 Lea and Febiger Boyd W. 1955; 202:513-514. Philadelphia