

### SOFT-TISSUE IMAGES. HYDATID DISEASE OF THE LIVER

A 27-year-old woman underwent a laparoscopic fenestration procedure for a solitary liver cyst at another institution. Although the histologic findings from the specimen of the excised cyst wall revealed a laminated membrane consistent with the outer layer of a hydatid cyst, she declined further treatment. A year later, she presented to the Prince of Wales Hospital with a 4-day history of right upper quadrant abdominal pain. Abdominal computed tomography revealed a multilocular cystic liver mass occupying the whole

of the right hepatic lobe. A diagnosis of hydatid disease of the liver with multiple daughter cysts (Fig. 1, arrow) was made. Intraoperative ultrasonography revealed the characteristic rosette appearance with the daughter-cysts image (Fig. 2). After instilling hypertonic saline into the cyst to sterilize its contents, we incised the cyst, and multiple daughter cysts with visible hydatid sand (Fig 3, arrowhead) were evacuated with a small ladle. Cystopericystectomy was performed. Histologic examination of the cyst and its daughter cysts con-

firmed the diagnosis of hydatid disease of the liver. The patient made a smooth recovery and was discharged from the hospital on a course of abendazole to be taken orally.

#### DISCUSSION

The eggs of *Echinococcus granulosus* in the excreta of definitive hosts, such as dogs, wolves, jackals, arctic foxes and domestic cats, when swallowed by humans (other intermediate hosts include cheep, goats, camels, reindeer and pigs) will produce larvae that pass into the liver and cause cystic hydatid disease. Echinococcosis in man is endemic in parts of the world where sheep are raised and humans are in close contact with dogs. Since the echinococcal cyst enlarges approximately 1 cm per year, the clinical manifestations of echinococcosis become apparent only after many years. The majority of patients are asymptomatic, and the only prominent physical finding is a palpable abdominal mass. Eighty percent of hydatid cysts of the liver involve the right lobe. The treatment of the disease is primarily surgical. At operation, the surgeon must avoid spillage of the highly antigenic cyst fluid and very infectious cystic content and endeavour to remove the cyst *in toto* after sterilizing its contents with 30% hypertonic saline solution.

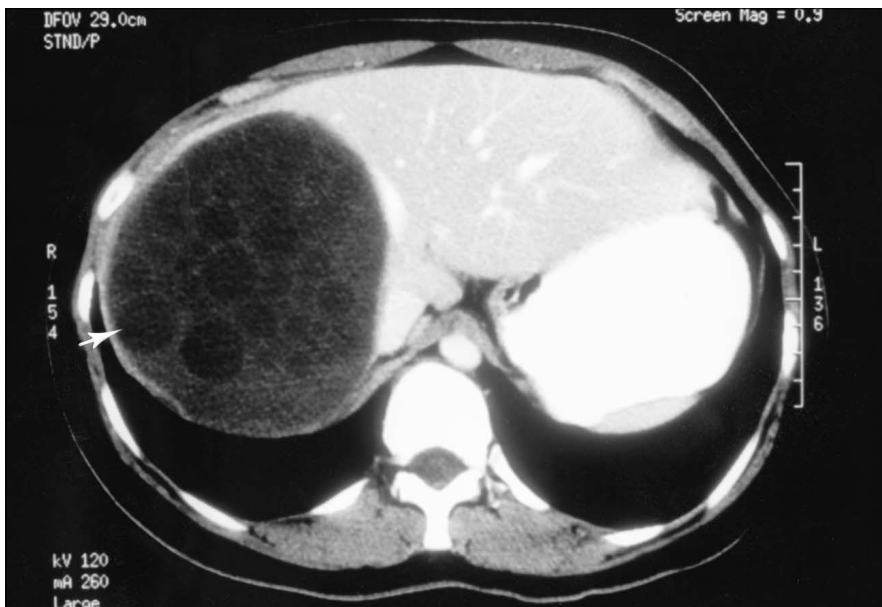


FIG. 1.

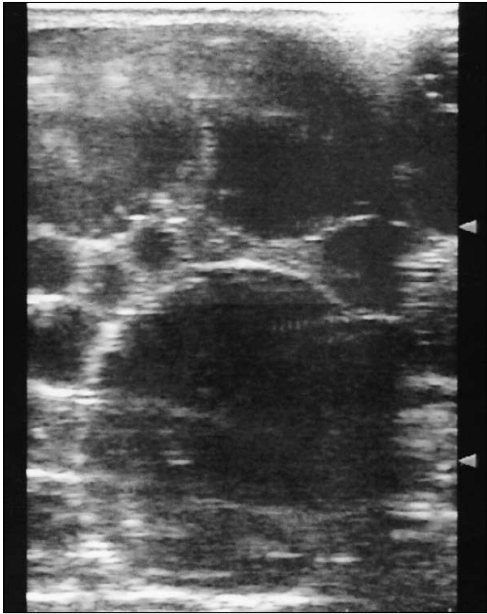
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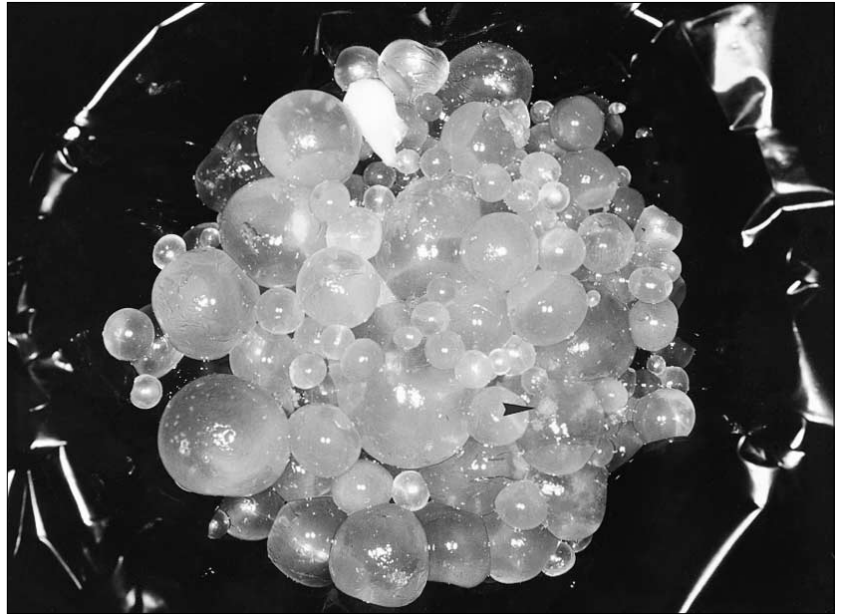
Submissions to Surgical Images, soft-tissue section, should be sent to Dr. David P. Girvan, Victoria Hospital Corporation, PO Box 5375, Station B, London ON N6A 5A5 or to Dr. Nis Schmidt, Department of Surgery, St. Paul's Hospital, 1081 Burrard St., Vancouver BC V6Z 1Y6.

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**FIG. 2.**



**FIG. 3.**