



CLINICAL IMAGES

Hydatid disease masquerading as an incisional hernia

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A female patient presented with a tender abdominal mass. She had had abdominal surgery 2 years previously but could not recall the details. An incarcerated incisional hernia was diagnosed. At surgery, numerous compressed cysts ballooned through the incision (Fig. 1); 17 cysts with granular contents were removed (Fig. 2). The underlying abdominal wall had no hernial defect. Hydatid cysts were confirmed histopathologically. Subsequent enquiry confirmed the previous excision of multiple hepatic hydatid cysts.

Hydatid disease (cystic echinococcosis) is endemic in sheep farming countries such as Australasia, Turkey, Greece, the Middle East, India, South America, Canada and South Africa.¹ Of the four known echinococcal species, three have medical significance. *Echinococcus granulosus*, the commonest form, causes cystic echinococcosis. *E. multilocularis*, the most virulent species, causes alveolar echinococcosis. *E. vogeli* is very rare and causes polycystic echinococcosis.²

The definitive host of the helminth is usually the dog or other canines. The usual intermediate hosts (sheep or goat) contract the infection when ingested eggs liberate their larvae in their duodenum. Humans are accidental intermediate hosts following consumption of unwashed and uncooked vegetables or close contact with dogs. The larvae cross the intestinal wall and cysts develop in the hepatic sinusoids. Dissemination of daughter cysts from the liver may occur to the lung (in up to 75% of cases), less common sites being the bone, heart, central nervous system, spleen and muscles.

Medical treatment is largely ineffective in curing the disease, although it may stabilise it. Albendazole and praziquantel combined are reported to be more effective than either agent alone.³ Medical treatment is also indicated for inoperable and disseminated cases. Surgery is indicated for complications of hepatic hydatid disease, such as compression or erosion into the biliary tree causing pain, jaundice and cholangitis.⁴



Fig. 1. Hydatid cysts masquerading as an incarcerated incisional hernia.



Fig. 2. Hydatid cysts removed.

Conservative surgical techniques such as marsupialisation, total cystectomy, and partial pericystectomy with omentoplasty

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are usually effective. Laparoscopic approaches have been described.⁵ Irrespective of the technique, spillage of cyst contents must be avoided and scolicalid agents appropriately used. Intraperitoneal spillage is nevertheless a possibility and accounts for the presentation in this patient. Percutaneous aspiration, injection and re-aspiration (the PAIR technique) is an attractive non-surgical option in endemic countries with scarce resources.⁶

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