Disseminated hydatidosis

Karan Manoj Anandpara, Yashant Aswani, Priya Hira

Seth G S Medical College and
KEM Hospital, Mumbai,
Maharashtra, India

Correspondence to
Dr Yashant Aswani,
aswaniyashant@gmail.com

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DESCRIPTION

A 44-year-old man presented with a 4-month history of multiple abdominal lumps, abdominal pain and dyspnoea on exertion. Palpation demonstrated

Figure 1 Roentgenogram showing a well-defined homogenous opacity in the right lower zone of the lungs (white arrow). Also noted is curvilinear calcification in the right hypochondriac region (black arrowheads).

multiple masses in the hypogastrium and lumbar regions. Roentgenogram revealed a well-defined opacity in the right lower zone and curvilinear calcification in the right hypochondrium (**figure 1**). Ultrasonography and CT (**figure 2**) revealed multiple echinococcal cysts in the liver, peritoneal cavity, retroperitoneum and right lung, at various stages of development. Serodiagnostic tests were positive for echinococcus. The patient was started on albendazole 400 mg twice daily and praziquantel 600 mg thrice daily. There was regression in cysts at 3 months' follow-up imaging.

Echinococcal infestation in humans occurs via accidental ingestion of eggs passed in canine (definitive host) faeces incidentally ingested by cattle (intermediate host).¹ The eggs hatch into larval forms that appear as simple cysts.² Specific findings include daughter cysts (pathognomonic feature), detached inner layer and wall calcification.² Mere pericystic calcification does not suggest death of the parasite, however, complete calcification does. The liver is the most commonly affected organ followed by lungs, brain, bones, kidneys and heart.¹ Disseminated abdominal hydatidosis is uncommon with peritoneal implantation occurring as a consequence of traumatic or surgical rupture of the cyst (secondary form).¹ Primary dissemination is rare and accounts for 2% of intra-abdominal hydatidosis.¹ Diagnosis is aided by ultrasound or CT.¹ Surgery is indicated for localised, complicated, superficial or multiseptated cysts while PAIR

Figure 2 Contrast-enhanced CT of the thorax, abdomen and pelvis in coronal reformation (A) and axial sections (B–E) reveal multiple cystic density lesions in the lower lobe of the right lung (B), liver (C) and peritoneal cavity (D), and with extension into the retroperitoneum (white arrow in E). Sections reveal pathognomonic appearance of cyst with multiple daughter cysts (white arrowhead in A, B, D and E). A few cysts reveal calcification (black arrowhead in A, C and E). One of the cysts showing a detached inner wall (black arrow in D).

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Learning points

- ▶ Disseminated lung, peritoneal and retroperitoneal hydatidosis is a rare presentation of hydatid disease, and is generally seen secondary to spontaneous rupture or iatrogenic spillage of hydatid cysts at more common sites such as liver and lungs.
- ▶ Radiological imaging in the form of ultrasound or CT forms the cornerstone of diagnosis. Ultrasonography can be used for PAIR (Puncture, Aspiration, Injection, Re-aspiration) as well as for follow-up of patients on medical therapy.
- ▶ While surgical excision forms the mainstay of treatment for localised hydatid cysts or cysts with infection and multiple septae, management of disseminated disease is medical therapy in the form of albendazole (benzimidazole). Praziquantel adds to its protoscolicidal activity. PAIR is performed for simple cysts and in high-risk surgical candidates or pregnant women.

(Puncture, Aspiration, Injection, Re-aspiration) is useful in simple cysts, poor surgical candidates or pregnancy.² Both forms, however, require peri-interventional benzimidazole therapy.² Treatment for disseminated disease is albendazole with/without praziquantel.²

Competing interests None.

Patient consent Obtained.

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