

Images in Infectious Diseases

Ruptured hepatic hydatid cyst with the formation of an abscess and a cutaneous fistula

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An 85-year-old woman was admitted to our emergency department with complaints of upper right abdominal quadrant pain, skin redness, and swelling on the right side of the abdomen (**Figure 1**). The medical record revealed that the patient had been diagnosed with hydatid disease based on computed tomography findings and detected with anti-*Echinococcus* IgG antibodies approximately 1 year before (**Figure 2A**) and treated with albendazole. Laboratory tests showed elevated C-reactive protein levels (117 mg/L) and white blood cell count ($17.7 \times 10^9/L$), and abdominal ultrasonography revealed an unshaped collection in the inferior segment of the right liver lobe spreading to the lateral abdominal wall, with fistulization to the skin. Contrast-enhanced magnetic resonance imaging (MRI) showed a ruptured hydatid cyst (HC) consistent with a previous liver HC lesion in liver segments VI and VII. On gadolinium-enhanced MRI, the ruptured HC appearance was peripherally enhanced, consistent with abscess formation, and accompanying soft tissue infection and fistulization were found (**Figure 2B**). A drainage catheter was placed in the patient under general anesthesia, and medical treatment was started.

Cystic echinococcosis is a zoonotic infection that causes >95% of echinococcal diseases in humans¹. HC rupture is a life-threatening complication that may occur both internally and externally². Abscess formation and the accompanying cutaneous fistulization of HC is an extremely rare complication that may lead to anaphylactic shock and sepsis³. Skin changes in the area of previous HC should be alerting, and both clinicians and radiologists should be aware of this extremely rare presentation.

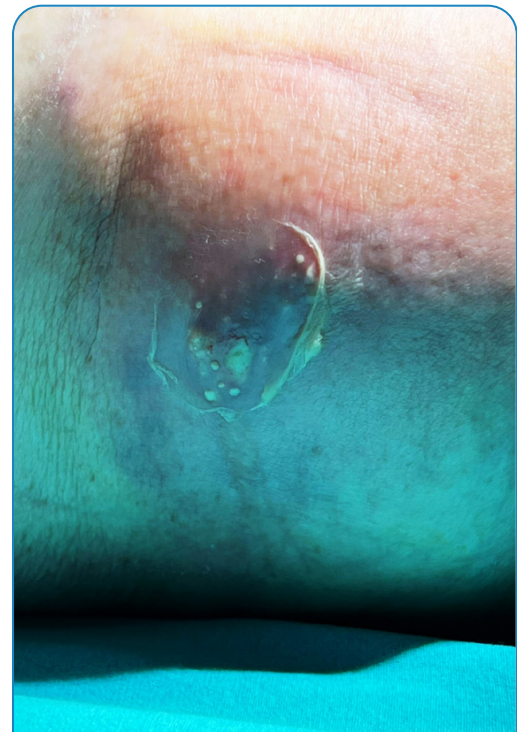


FIGURE 1: Skin redness and swelling on the right side of the abdomen. Fistulization of the abscess presenting with green abscess content on the skin.

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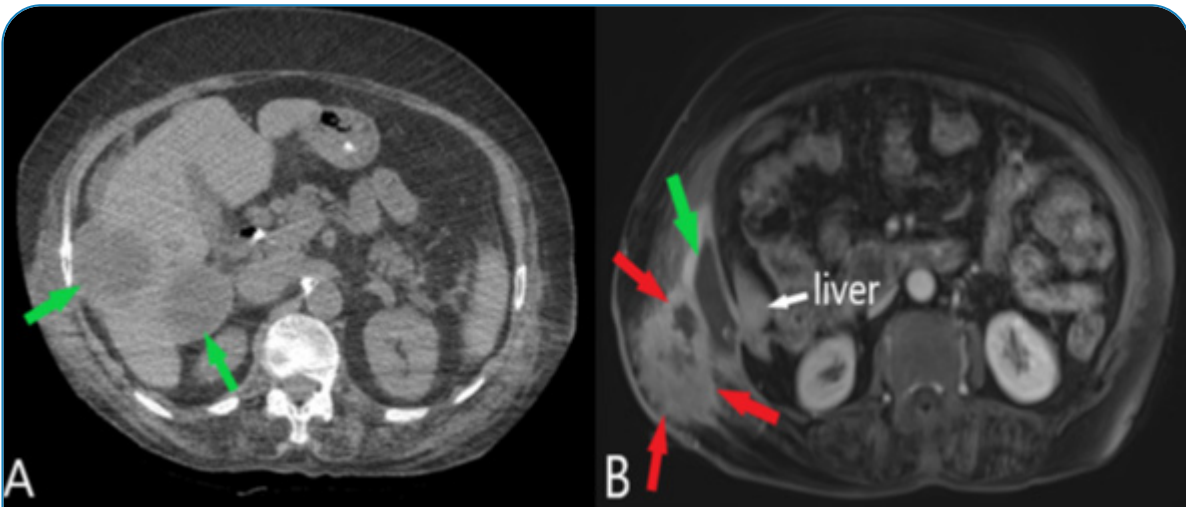


FIGURE 2: (A) The abdominal computed tomography scan performed 1 year before shows HC lesions in the liver (green arrows). (B) The MRI scan demonstrates a ruptured HC appearance consistent with a previous liver HC lesion in liver segments VI and VII (green arrow). The gadolinium-enhanced MRI scan shows a peripherally enhanced ruptured HC appearance consistent with abscess formation and accompanying soft tissue infection and fistulization (red arrows).

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