

Imaging Hydatid Cyst with Cysto-biliary Communication-commonly Missed Entity

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ABSTRACT

Hydatid cyst of liver or hepatic echinococcosis rupture into the biliary tree is common and the rupture can be occult or frank. We present a case of a 39-year-old female presented with lump abdomen diagnosed with hydatid cyst on ultrasound sonography (USG) with decrease in size with span of 2 days. Computed tomography (CT) was done which revealed classic diagnostic findings which were later confirmed by operative findings.

Key words: Biliary tree, cysto-biliary communication, hydatid

INTRODUCTION

Hydatid cyst of liver also known as hepatic echinococcus can rupture into the biliary tree and it can be occult or frank.^[1] Radiological diagnosis before surgical intervention is of utmost importance as the surgeon is prepared well beforehand with better surgical management.

CASE REPORT

We present a case of a 39-year-old female presented with lump abdomen diagnosed with hydatid cyst on ultrasound sonography (USG) with decrease in size with span of 2 days. Computed tomography (CT) was done which revealed classic diagnostic findings which were later confirmed by operative findings. The non-contrast CT (NCCT) and contrast-enhanced CT (CECT) abdomen images show a well-defined large cystic lesion in the right lobe of the liver with non-contrast axial image showing intraluminal membranes

(GHARBI Stage II) and CECT images show a defect in the cyst wall which is communicating with biliary radicals.

DISCUSSION

Hydatid cyst of liver or hepatic echinococcosis rupture into the biliary tree is common and the rupture can be occult or frank.^[1]

Clinical manifestation

It usually presents with colicky right upper quadrant abdominal pain and obstructive jaundice.

Occasionally with fever and chills, however, in occult cases, it may be silent as in our case.^[2-4]

Key imaging diagnostic clues

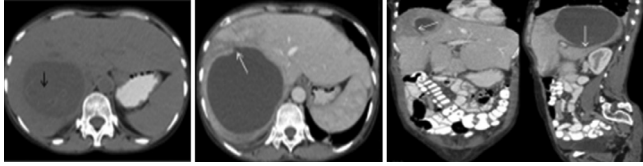
1. CT may reveal the communication with cyst wall and biliary tract.^[5,6]
2. High attenuation material may be seen intraluminally in the biliary tree with dilated biliary tree.^[1-3,7,8]

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3. On USG echogenic intraluminal material is seen
4. Magnetic resonance cholangiopancreatography (MRCP) also reveals a connection between hydatid cyst and biliary system along with deformation of cyst, focal defect in cyst wall, or beaklike projection extending from cyst wall.^[2]



A 39-year-old female presented with lump abdomen diagnosed with hydatid cyst on USG with decrease in size with span of 2 days, NCCT and CECT abdomen images show a well-defined large cystic lesion in the right lobe of the liver with non-contrast axial image showing intraluminal membranes (black arrow) and CECT images show defect in the cyst wall which is communicating with biliary radicals (white arrows).

CONCLUSION

Hydatid cyst of liver or hepatic echinococcosis rupture into the biliary tree is common and the rupture can be occult or frank on imaging; however, all three modalities, i.e., ultrasonography, CT, and MRCP have characteristic imaging findings which are discussed our case report and help the surgical intervention as stenting is planned beforehand.

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