



IMAGE OF THE MONTH

Biliary stenosis secondary to fistulised hydatid cyst that mimics Klatskin tumour[☆]



Estenosis biliar secundaria a quiste hidatídico fistulizado que simula tumor de Klatskin

Cristina Saldaña^{*}, Federico Bolado, Belén González de la Higuera, Erika Borobio, Maria Angeles Casi

Aparato Digestivo, Complejo Hospitalario de Navarra, Pamplona, Navarra, Spain

An 87-year-old woman was admitted for painless obstructive jaundice (bilirubin 5.8 mg/l) with dilation of the intrahepatic bile duct and a suspected Klatskin tumour on a computed tomography (CT) scan (Fig. 1). An adjacent calcified cystic lesion was also reported (Fig. 2).

Endoscopic retrograde cholangiopancreatography showed a filled cyst in the hilum of the liver fistulised to the bile duct and causing secondary bile duct stenosis and compression (Fig. 3). Given the patient's age and risk of the cyst re-filling, a decision was made to place an 8-cm uncoated metal biliary stent and confirm contrast emptying. Subsequent clinical and laboratory resolution.

Hydatid disease is a zoonotic infectious disease caused by *Echinococcus granulosus* (with a prevalence of 5%–10% in the Mediterranean region) associated with dogs and livestock^{1–3} and primarily affecting the liver (45%–75%).¹

Although most patients remain asymptomatic, serious complications such as fistulisation have been reported.²



Figure 1 Computed tomography image showing bilateral intrahepatic biliary tract dilation and the area of the associated mass effect in the hilum suggestive of malignancy (yellow circle).

Fistulas (2%–75%) may be due to a connection between the cyst and the duct releasing hydatids into the biliary tract or to a hidden connection between bile duct branches (these usually remain asymptomatic).⁴

Various factors in fistulisation have been reported such as size (>8.8 cm), cyst type (Gharbi type 3 or 4⁵) and location in the hilum.^{2,3}

Advances in endoscopy enable non-invasive management; placement of a biliary stent, with or without balloon dilation, is the management option of choice.³

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^{*} Corresponding author.

E-mail address: crisaldu@hotmail.com (C. Saldaña).

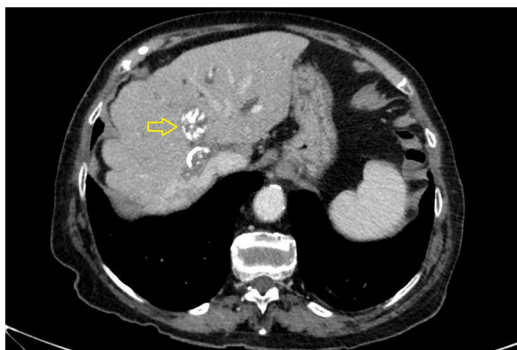


Figure 2 Computed tomography image showing 2 round calcified lesions suggestive of hydatid cysts (yellow arrow).

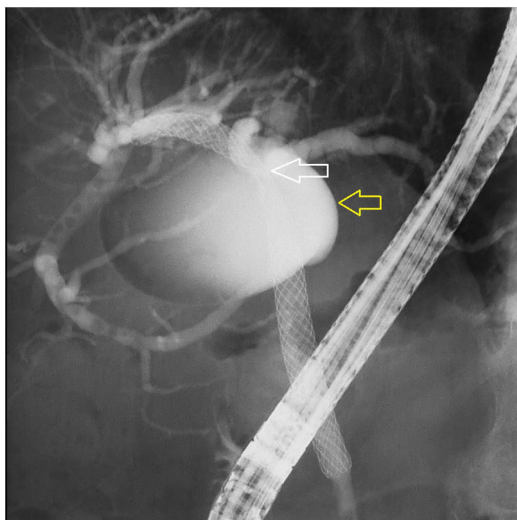


Figure 3 Endoscopic retrograde cholangiopancreatography image showing a cystic lesion which filled with contrast (yellow area) fistulised to the biliary tract, causing stenosis (white arrow), for which reason an uncoated metal biliary stent with a length of 8 cm and a calibre of 1 cm was placed and drainage was confirmed.

References

1. Ahmad BS, Afzal A, Ashraf P, Abubakar SA, Munir A. Manifestation of hydatid cyst of liver with pancreatitis, cholangitis and jaundice: a case report. *J Pak Med Assoc.* 2018;68:1097–9.
2. Akkapulu N, Aytac HO, Arer IM, Kus M, Yabanoglu H. Incidence and risk factors of biliary fistulation from a hepatic hydatid cyst in clinically asymptomatic patients. *Trop Doct.* 2018;48:20–4.
3. Stojkovic M, Junghans T, Veeseer M, Weber TF, Sauer P. Endoscopic treatment of biliary stenosis in patients with alveolar echinococcosis—report of 7 consecutive patients with serial ERC approach. *PLoS Negl Trop Dis.* 2016;10:e0004278.
4. Ramia JM, Figueras J, De la Plaza R, Garcia-Parreno J. Cysto-biliary communication in liver hydatidosis. *Langenbecks Arch Surg.* 2012;397:881–7.
5. Gharbi HA, Hassine W, Brauner MW, Dupuch K. Ultrasound examination of the hydatid liver. *Radiology.* 1981;139:459–63.