Gastroenterol Hepatol. 2019;42(1):41–42

Gastroenterología y Hepatología

www.elsevier.es/gastroenterologia

IMAGE OF THE MONTH

Hepatobiliary scintigraphy with SPECT/CT in the diagnosis of postsurgical biliopleural fistula☆

Gammagrafía hepatobiliar con SPECT/TC en el diagnóstico de una fístula biliopleural posquirúrgica

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This was a 66-year-old male diagnosed with hydatid cyst of the liver affecting the right lobe. During the surgical intervention (laparoscopic right hepatectomy) right pneumothorax occurred as a consequence of multiple hepatic-phrenic adhesions, requiring placement of a pleural drain. Postoperatively, biliary fluid was observed coming from the pleural drain, suggesting the possible presence of a biliary-pleural fistula. The diagnosis was confirmed by hepatobiliary scintigraphy, which showed the passage of the radiopharmaceutical into the pleural cavity, confirming the cause of the leak (Fig. 1).

A biliary-pleural fistula is abnormal communication between the biliary tract and the pleura. In most cases, it is an acquired condition and among its predisposing factors are liver injury, parasitic disease, obstruction of the biliary tract or an iatrogenic cause: migration of biliary stents, postcholecystectomy, liver biopsy or radiofrequency ablation of liver lesions.[1]

Hepatobiliary scintigraphy with ^{99m}Tc-mebrofenin is a non-invasive test that can detect this problem; in our case, the fistulous tract from the liver to the pleural space was clearly defined. It is a very useful imaging technique as the first step in the diagnosis of postoperative biliary complications.[2,3]

☆ Please cite this article as: Díaz-Antonio T, Sanz-Viedma S, Delgado García A, Roldán de la Rúa J, Martínez del Valle Torres MD, Suárez Muñoz MÁ. Gammagrafía hepatobiliar con SPECT/TC en el diagnóstico de una fístula biliopleural posquirúrgica. Gastroenterol Hepatol. 2019;42:41–42.

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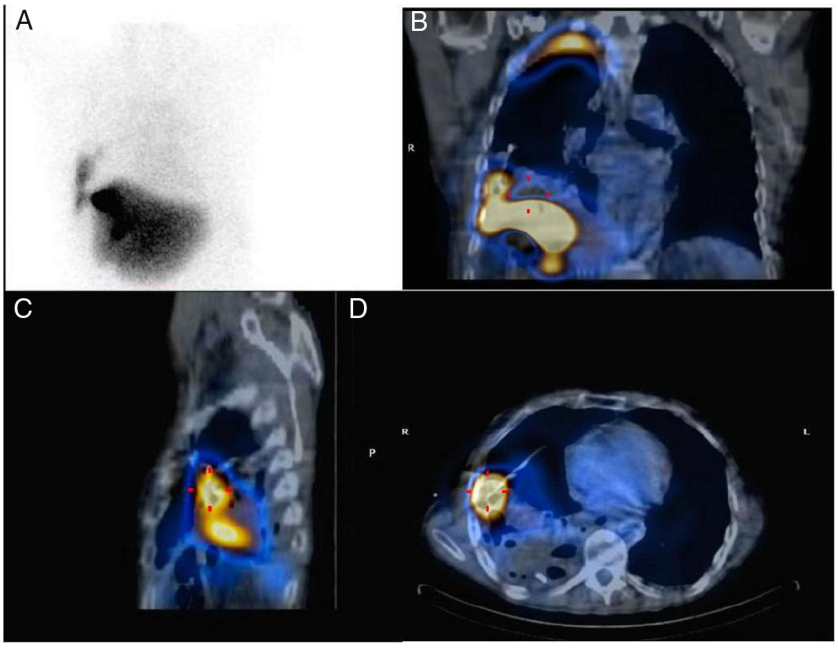

Figure 1 (A) Hepatobiliary scintigraphy. Planar image. (B–D) SPECT/CT coronal, sagittal and axial. Shows the passage of the radiopharmaceutical through the fistula to the right pleuro-pulmonary space.

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