



CIRUGÍA ESPAÑOLA

www.elsevier.es/cirugia



Scientific letter

Hepatic Abscess Caused by a Fishbone: An Unusual Finding[☆]



Absceso hepático por espina de pescado, un hallazgo inusual

Pyogenic liver abscesses usually have a biliary origin or are secondary to a septic focus that reaches the liver by either the portal or arterial route.¹ Despite advances made in imaging studies and treatment, they are still a therapeutic challenge.² There has been a recent increase in the incidence of liver abscesses caused by perforations of the gastrointestinal tract after the ingestion of foreign bodies. The first case was reported by Lambert in 1989, and since then about 60 cases have been published in the literature.²⁻⁴

This entity is a diagnostic challenge because accidental ingestions are often forgotten, and the non-specific symptoms can lead to a misdiagnosis of cryptogenic abscesses.^{5,6} Likewise, this etiology must be taken into account in the differential diagnosis of recurrent pyogenic liver abscesses.²

We present two clinical cases of liver abscesses secondary to perforation of the gastrointestinal tract by a fishbone.

Case 1. A 74-year-old woman with a history of arterial hypertension, diabetes mellitus and cholecystectomy presented with pain in the right renal fossa that radiated toward the right hypochondrium and a week-long fever. Percussion of the kidneys was positive, and lab work showed no alterations. On abdominal ultrasound, a heterogeneous lesion with multiple septa was observed in liver segment V, which was confirmed by computed tomography (CT) scan as a space-occupying lesion suggestive of a multi-walled abscess, measuring 10 cm in diameter.

After empirical antibiotic therapy and percutaneous drainage, the lesion persisted and urgent surgical intervention was therefore indicated. By means of subcostal laparotomy, surgical drainage was performed twice, one week apart. However, there was no clinical or radiological improvement, and the etiology of the abscess was not determined. On the seventh postoperative day, the patient was discharged to ambulatory follow-up, remaining asymptomatic and afebrile. On the follow-up CT scan, the lesion was visualized again accompanied by a linear image of bone density measuring

3 cm in connection with the gastric antrum and in intimate contact with the abscess (Fig. 1), which was not clearly visualized in the previous imaging tests.

A surgical intervention was scheduled for re-laparotomy and debridement of the inflammatory tissue encompassing the gastric antrum, hepatic flexure of the colon and liver segments V and VI, with a 4-cm fishbone that was perforating the lateral side of the lesser curvature of the stomach and piercing the liver. The fistula tract was resected and closed, the foreign body extracted and the abscessed liver area resected (Fig. 1b). The patient was discharged on the eighth day and has currently had no recurrence of the disease.

Case 2. A 44-year-old male with diffuse abdominal pain for one month, who consulted for worsening pain and leukocytosis (18 500/mm³). CT scan revealed a linear foreign body with calcium density measuring 4 cm in the left lobe of the liver, adjacent to an intraparenchymal collection measuring 5 cm at its largest diameter, suggestive of liver abscess (Fig. 2); edema was also seen around the second part of the duodenum, with a possible area of perforation. Conservative treatment was initiated with empirical antibiotic therapy; the patient presented proper evolution and was discharged on the eighth day.

Elective surgery was subsequently conducted; after bilateral subcostal laparotomy, an inflammatory mass was found at the lesser curvature of the stomach. The abscess was drained, the gastric antrum perforation closed and the fishbone removed (Fig. 2b). The patient was discharged on the fifth day, with no complications or subsequent recurrence.

In general, accidentally-ingested foreign bodies pass through the gastrointestinal tract without complications in about one week.^{1,7} In certain cases (<1%), they cause intestinal perforation, migrate and reach the hepatic parenchyma, causing a liver abscess. The most frequent locations of perforation are the pylorus and the duodenum, and the migration zone is frequently the left hepatic lobe, due to proximity.²

[☆] Please cite this article as: Jaén Torrejimenó I, Galeano Díaz F, López Guerra D, Blanco Fernández G. Absceso hepático por espina de pescado, un hallazgo inusual. Cir Esp. 2019;97:598-600.

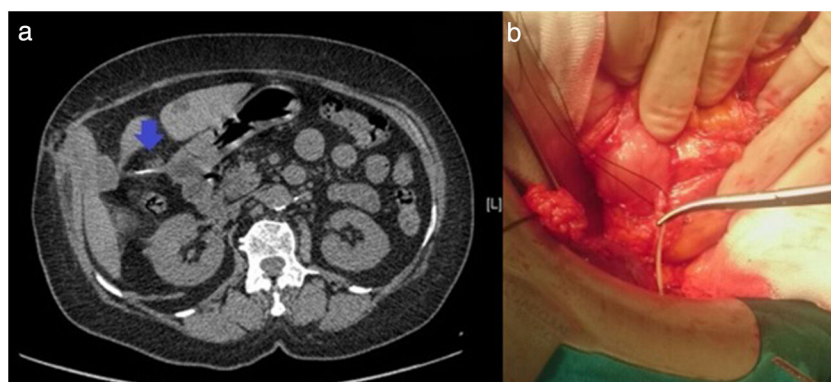


Fig. 1 – (a) Axial slice of the CT scan, showing a foreign body (fishbone, blue arrow); on the right; (b) intraoperative image where the bone is observed in the fistula tract to the liver. The figure colors can only be seen in the electronic version of the article.

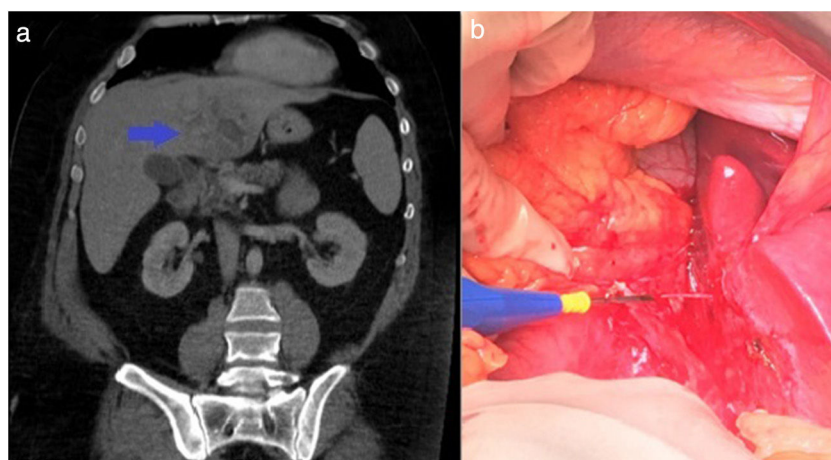


Fig. 2 – (a) Axial slice of the CT scan, showing intrahepatic abscess in the left hepatic lobe indicated by the blue arrow; (b) intraoperative image during the extraction of the fishbone from the liver. The figure colors can only be seen in the electronic version of the article.

These abscesses secondary to foreign bodies are usually related to sharp and pointed elements (toothpicks, chicken bones, needles or fishbones).^{3,5} Symptoms are non-specific (abdominal pain, fever, jaundice, weight loss and/or fatigue), and most patients do not remember having ingested the foreign body.^{1,8} Lab work usually shows elevated inflammatory parameters as well as increased liver enzyme levels. CT scan is the diagnostic test of choice due to its high resolution and diagnostic accuracy.⁶

Recent studies advocate initial conservative management with empirical antibiotic therapy, sometimes associated with percutaneous drainage, and subsequent removal of the foreign body either endoscopically or surgically.^{2,5} Endoscopic management may be indicated in cases diagnosed early and before perforation/migration of the foreign body has occurred.⁷ Despite this, surgery with removal of the foreign body, closure of the perforation, drainage and debridement of the abscess continues to be the treatment of choice to prevent recurrence.^{5,9}

This etiology should be included in the differential diagnosis of a single, recurrent abscess, or with indirect evidence of adhesion or inflammation between the gastrointestinal tract and the liver observed on imaging tests, suggestive of the migration of a foreign body.² Due to the imprecise diagnosis, multidisciplinary management is important, and surgery is the basic pillar for a definitive resolution.^{7,8}

REFERENCES

1. Glick WA, Simo KA, Swan RZ, Sindram D, Iannitti DA, Martinie JB. Pyogenic hepatic abscess secondary to endolumenal perforation of an ingested foreign body. *J Gastrointest Surg.* 2012;16:885-7. <http://dx.doi.org/10.1007/s11605-011-1711-7>.
2. Leggieri N, Marques-Vidal P, Cerwenka H, Denys A, Dorta G, Moutardier V, et al. Migrated foreign body liver abscess illustrative case report, systematic review, and proposed

- diagnostic algorithm. *Medicine* (Baltimore). 2010;89:85-95. <http://dx.doi.org/10.1097/MD.0b013e3181d41c38>.
3. Ng CT, Htoo A, Tan SY. Fish bone-induced hepatic abscess: medical treatment. *Singap Med J*. 2011;52:3-5. <http://smj.sma.org.sg/5203/5203cr6.pdf>.
 4. Ede C, Sobnach S, Kahn D, Bhyat A. Enterohepatic migration of fish bone resulting in liver abscess. *Case Rep Surg*. 2015;2015:1-2. <http://dx.doi.org/10.1155/2015/238342>.
 5. Matrella F, Lhuair M, Piardi T, Dokmak S, Bruno O, Mastraggi Q, et al. Liver hilar abscesses secondary to gastrointestinal perforation by ingested fish bones: surgical management of two cases. *Hepatobiliary Surg Nutr*. 2014;3:156-62. <http://dx.doi.org/10.3978/j.issn.2304-3881.2014.04.01>.
 6. Tan CH, Chang SYH, Cheah YL. Laparoscopic removal of intrahepatic foreign body: a novel technique for management of an unusual cause of liver abscess – fish bone migration. *J Laparoendosc Adv Surg Tech A*. 2016;26:47-50. <http://dx.doi.org/10.1089/lap.2015.0487>.
 7. Masoodi I, Alsayari K, Al Mohaimeed K, Ahmad S, Almtawa A, Alomair A, et al. Fish bone migration: an unusual cause of liver abscess. *BMJ Case Rep*. 2012;10-3. <http://dx.doi.org/10.1136/bcr.09.2011.4838>.
 8. Liang H, Liu OQ, Ai XB, Zhu DQ, Liu JL, Wang A, et al. Recurrent upper quadrant pain: a fish bone secondary to gastric perforation and liver abscess. *Case Rep Gastroenterol*. 2011;5:663-6. <http://dx.doi.org/10.1159/000335211>.
 9. Lardi re-Deguelte S, Ragot E, Amroun K, Piardi T, Dokmak S, Bruno O, et al. Hepatic abscess: diagnosis and management. *J Visc Surg*. 2015;152:231-43. <http://dx.doi.org/10.1016/j.jvisc Surg.2015.01.013>.

Isabel Ja n Torrejimenos*, Francisco Galeano D  a,
Diego L  pez Guerra, Gerardo Blanco Fern  ndez

Servicio de Cirug  a Hepatobiliopancre  tica y Trasplante Hep  tico,
Complejo Hospitalario Universitario de Badajoz, Hospital Infanta
Cristina, Badajoz, Spain

*Corresponding author.

E-mail address: isajaent@gmail.com (I. Ja n Torrejimenos).

<http://dx.doi.org/10.1016/j.cireng.2019.11.009>
2173-5077/

   2018 AEC. Published by Elsevier Espa  a, S.L.U. All rights reserved.

Li Fraumeni Syndrome[☆]

S  ndrome de Li-Fraumeni



Although strategies have been defined for the management of certain inherited cancers (breast, ovarian, colorectal, and endometrial), the management of patients with mutations involving increased risk of cancer is a major concern that has not been defined.

Germline mutations in the TP53 gene result in a rare inherited condition known as Li-Fraumeni syndrome (LFS).¹

We present the case of a 21-year-old woman with abdominal pain in the left hypochondrium and fever. At the age of 11, she had been diagnosed with osteosarcoma of the right proximal humerus, with no metastasis. She had been treated with the SEOP 2001 chemotherapy protocol (ifosfamide days 1-5 and adriamycin 25 mg/m² days 1-3) before and after surgery with right interscapulothoracic disarticulation. The patient had residual neuroma, which was followed-up annually until July 2017. Family history included a maternal grandfather who had died from lung cancer (age 69) and paternal grandfather from prostate cancer (age 78). Physical examination revealed a distended, painful abdomen in the left hypochondrium and a mass, but no abdominal guarding. Lab work showed leukocytosis, neutrophilia and CRP 340. CT scan detected a heterogeneous mass measuring 10×5 cm in the left hypochondrium, which was

extensively necrotic and abscessed, displacing neighboring structures and presenting air-fluid level. Other observations included: splenomegaly with areas suggestive of infarctions, liver with no focal lesions, kidneys without findings, no pathological lymphadenopathies, and moderate intraperitoneal free fluid.

The surgery identified a purulent peritonitis of 2.5 L with a dependent mass of the distal transverse colon embedded anterior to the splenic hilum. At a posterior level, it was in contact with the tail of the pancreas and the greater curvature of the stomach up to the fundus. No space-occupying lesions were palpated in the liver. After left hemicolectomy and splenectomy with primary reconstruction of the intestinal tract, the patient recovered the transit on the fifth postoperative day and was discharged after extension studies with brain and breast MRI, as well as a genetic study at the National Oncology Research Center (Fig. 1).

The pathological anatomy study identified a gastrointestinal stromal tumor (GIST) that was multifocal, low-grade and fusiform, measuring 5×3 cm, with free surgical margins and no lymphovascular or perineural invasion. There were less than 50 mitoses per high-power field (G1), and no evidence of necrosis was observed. Peritoneal cytology was negative for

^{  } Please cite this article as: Ruiz G  mez F, de Miguel Iba  ez R, Moreno Serrano A, P  rez Dominguez T, Palomo S  nchez JC. S  ndrome de Li-Fraumeni. *Cir Esp*. 2019;97:600-602.