

# Title: A liver abscess secondary to a toothpick: a rare complication of accidental foreign body ingestion

Authors: Baltasar Pérez Saborido, Martín Bailón Cuadarado, Rosalía Velasco Díaz

DOI: 10.17235/reed.2018.5860/2018 Link: <u>PubMed (Epub ahead of print)</u>

Please cite this article as:

Pérez Saborido Baltasar, Bailón Cuadarado Martín, Velasco Díaz Rosalía. A liver abscess secondary to a toothpick: a rare complication of accidental foreign body ingestion. Rev Esp Enferm Dig 2018. doi: 10.17235/reed.2018.5860/2018.



This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.



### CC 5860 solo inglés

A liver abscess secondary to a toothpick: A rare complication of accidental foreign body ingestion

Baltasar Pérez Saborido, Martín Bailón Cuadrado y Rosalía Velasco Díaz

Hepatobiliary Surgical Unit. General and Digestive Surgical Department. Hospital Universitario Río Hortega. Valladolid, Spain

Key words: Liver abscess. Foreign body. Toothpick.

Corresponding author: Baltasar Pérez Saborido e-mail: <u>ps.baltasar@gmail.com</u>

Dear Editor,

Perforation of the gastrointestinal tract caused by the ingested foreign bodies and subsequent hepatic abscess formation is uncommon (1). Early diagnosis is difficult and the treatment is mainly surgical (1,2).

### Case report

A 62-year-old female presented to the emergency department due to pain in right hypochondrium and fever of several days duration with a poor general condition, nausea and vomiting. Abdominal CT scan identified a left hepatic lobe abscess (60 x 48 mm) with a high-density image inside (suggestive of foreign body) and a suspected gastric antrum perforation (Fig. 1A). During surgery, an inflammatory mass was found between the gastric antrum and the left hepatic lobe. A toothpick was observed on the lower side of left hepatic lobe that communicated with the hepatic abscess. It was not



possible to demonstrate a hollow viscera perforation. The abscess was drained by hepatotomy, the foreign body was removed (Fig. 1 B-C) and the gastric antrum was reinforced with tissue sealant and omentoplasty.

### Discussion

Liver abscesses due to the ingestion of foreign bodies are rare and represent 1-5% of hepatic abscesses. The first case was published in 1898 and nowadays, less than 100 cases have been reported. Fish bones, toothpicks and chicken bones are the most frequent etiological agents (3). Clinical symptoms are non-specific and patients do not usually remember a foreign body ingestion (3-5). In addition, the interval between ingestion and symptom presentation might vary from one week to one year (2), making diagnosis even more difficult.

The most accepted management is surgical treatment with drainage of the abscess, removal of the foreign body and closure of the perforation, if identified. Although we are conscious that a laparoscopic approach is feasible, an open approach was decided upon due to clinical instability and septic condition of the patient (1-5). Although a more conservative management maybe performed, we consider, as many other authors, that surgical treatment is the best option in order to avoid recurrence of the abscess.

#### References

 Santos SA, Alberto SC, Cruz E, et al. Hepatic abscess induced by foreign body: case report and literature review. World J Gastroenterol 2007;13(9):1466-70. DOI: 10.3748/wjg.v13.i9.1466

2. Matrella F, Lhuaire M, Piardi T, et al. Liver hilar abscesses secondary to gastrointestinal perforation by ingested fish bones: surgical management of two cases. Hepatobiliary Surg Nutr 2014;3(3):156-62.

3. Tallón Aguilar L, Bernal Moreno DA, López Porras M, et al. Cuerpo extraño como causa infrecuente de absceso hepático. Rev Esp Enferm Dig 2011;103(6):335-6.

4. Jiménez Fuentes M, Moreno Posadas A, Ruiz Tovar J, et al. Absceso hepático secundario a una perforación duodenal por espina de pescado. Rev Esp Enferm Dig



## 2016;108(1):42.

5. Cardoso C, Freire R, Mangualde J, et al. Hepatic abscess caused by an ingested chicken bone. Rev Esp Enferm Dig 2013;105(1):44-5. DOI: 10.4321/S1130-01082013000100007

**Fig. 1.** A. Abdominal CT images showing a lineal high density imagen inside de liver (yellow arrow). B. Subtraction images showing the foreign body (yellow arrow) and left hepatic lobe liver abscess and foreign body inside (yellow arrow). C. Removing foreign body from the liver.