

PICTURES IN DIGESTIVE PATHOLOGY

Hepatic abscess caused by an ingested chicken bone

Cláudia Cardoso, Ricardo Freire, Joao Mangualde and Ana Paula Oliveira

Centro Hospitalar de Setúbal. Portugal

CASE REPORT

An 80-year-old man, presented to our hospital with a history of fever, vomiting and diarrhea that had started one week before. Blood tests revealed an elevated white cell count and mildly increased aminotransferases and alkaline phosphatase levels. Abdominal ultrasound demonstrated a hypoechoic lesion in the left hepatic lobe. Contrast CT scan confirmed the presence of a liver abscess with a diameter of 4.5 cm. Furthermore, two bone density foreign bodies, one with 3.5 cm adjacent to the liver lesion and the other in the ascending colon (Figs. 1,2,3) were observed. The patient was started on a large spectrum antibiotic therapy with clinical improvement and reduction of the abscess size on imaging. A colonoscopy was performed with removal of a 7 cm chicken bone located in the ascending colon.

DISCUSSION

About 80-90% of ingested foreign bodies pass through the gut without symptoms (1). Gastrointestinal perforation, mostly of the stomach and the duodenum, is a rare event, occurring in less than 1% of cases (2). The development of a liver abscess in this setting, which occurs mainly after duodenum perforation and subsequent migration to the liver, is even rarer (3).

Classical clinical features (fever, abdominal pain and jaundice) are often absent, making an early diagnosis difficult. Furthermore, most patients do not recall any episode of foreign body ingestion, as it was the case of this patient (4).

Abdominal ultrasound or CT scan are the preferred diagnostic tests. In some cases, an exploratory laparotomy may be necessary (1).

Treatment usually includes antibiotics, abscess drainage and foreign body removal (5).

In the present case, a conservative approach, with antibiotic therapy and removal of the bone fragment located in the colon was decided due to the patient's advanced age. Since regression

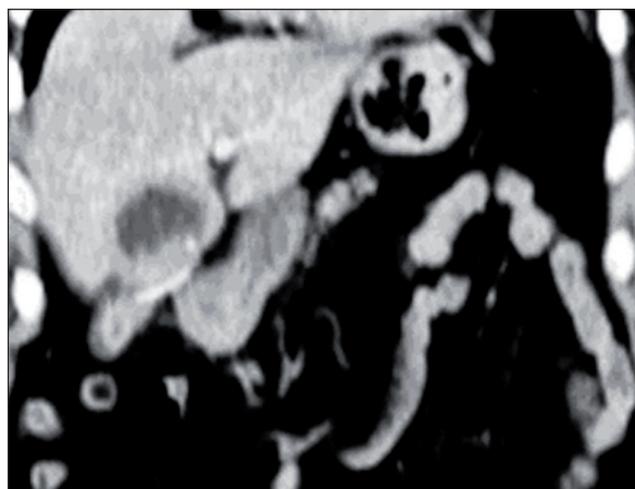


Fig. 1. Contrast CT scan showing a hepatic abscess with 4.5 cm of diameter and a 3.5 cm bone density foreign body adjacent to the lesion.



Fig. 2. Contrast CT scan with a 7 cm bone density foreign body in the ascending colon.

of the abscess was observed under antibiotic treatment, no further therapy was deemed necessary and the patient was kept under close surveillance. Six months later, abdominal ultrasound showed complete abscess regression and an echogenic lesion suggesting a hepatic granuloma.

REFERENCES

1. Kanazawa S, Ishigaki K, Miyake T, Ishida A, Tabuchi A, Tanemoto K, et al. A granulomatous liver abscess which developed after a toothpick penetrated the gastrointestinal tract: Report of a case. *Surg Today* 2003;33: 312-4.
2. Broome CJ, Peck RJ. Hepatic abscess complicating foreign body perforation of the gastric antrum: An ultrasound diagnosis. *Clin Radiol* 2000;55:242-3.
3. Bilimoria KY, Eagan RK, Rex DK. Colonoscopic identification of a foreign body causing an hepatic abscess. *J Clin Gastroenterol* 2003;37: 82-5.
4. Chintamani, SV, Lubhana P, Durkhere R, Bhandari S. Liver abscess secondary to a broken needle migration - A case report. *BMC Surg* 2003;3:8.
5. Horii K, Yamazaki O, Matsuyama M, Higaki I, Kawai S, Sakaue Y. Successful treatment of a hepatic abscess that formed secondary to fish bone penetration by percutaneous transhepatic removal of foreign body: report of a case. *Surg Today* 1999;29:922-6.

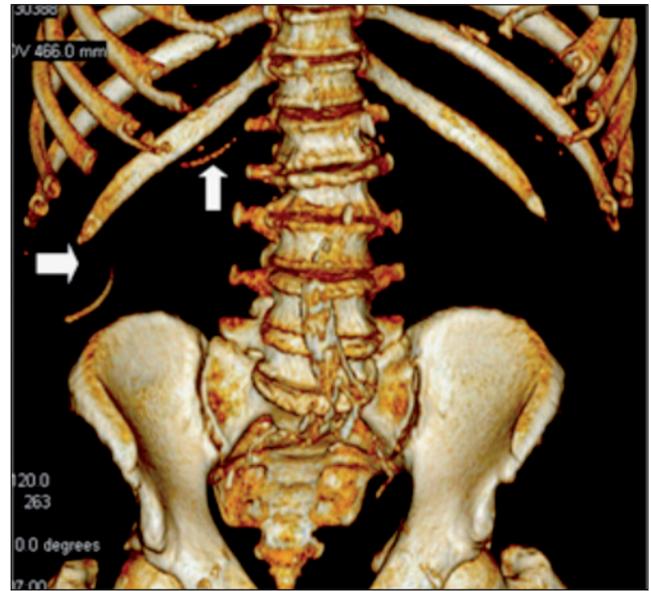


Fig. 3. 3D CT reconstruction showing the two bone density foreign bodies (hepatic and colonic).