

Ingested pin penetrating stomach wall and liver

A 23-year-old woman with no past medical history was referred to the Emergency Room with abdominal pain. She explained that 3 days earlier, she had accidentally ingested a sharp pin. Physical examination found a right upper quadrant tenderness with no abdominal guarding. Routine laboratory work-up was unremarkable. A computed tomography scan showed that the pin was penetrating through the gastric wall and into the left lobe of the liver (● Fig. 1), without pneumoperitoneum.

Antibiotic therapy (amoxicillin + clavulanic acid) was started. Endoscopic removal was attempted under general anesthesia and orotracheal intubation. A retractable latex hood was placed on a single-channel gastroscope. The 4-mm diameter plastic head of the proximal end of the pin was visible at the anterior wall of the antrum next to the pylorus. The pin was spontaneously spinning and swinging back and forth through the gastric wall with breathing (● Fig. 2).

The pin was dislodged using a polypectomy snare and biopsy forceps were used to grab the distal sharp tip. The 45-mm long pin was withdrawn along the esophagus safely covered by the latex hood. The patient was discharged after 2 days. She received oral antibiotics for 1 week and remained symptom-free 2 months later. Endoscopic removal of foreign bodies penetrating into the liver is rare [1–3]. In one case where the needle had fully penetrated the gastric wall, maximal insufflation helped to push the gastric wall towards the foreign body and allowed endoscopic extraction [3]. Complications of intrahepatic foreign bodies (hemorrhage or peritonitis) may be fatal and could occur even years after ingestion. In such a critical situation, laparoscopic extraction is recommended [4]. A combined laparoscopic and endoscopic approach has also been described [2]. In selected cases, endoscopic removal of a foreign body penetrating through the stomach and into the liver is feasible and safe and can prevent further complication or the need for laparoscopic extraction.

Competing interests: None

Endoscopy_UCTN_Code_CCL_1AB_2AD_3AF



Fig. 1 Pin penetrating through the gastric wall and into the liver.



Fig. 2 Spontaneous movements of the pin with breathing.

H. Duboc¹, R. Kianmanesh², X. Dray¹

¹ Emergency Endoscopy Ward, Department of Digestive Diseases, APHP, Hôpital Lariboisière, Paris, France

² Department of Digestive Surgery, APHP, Hôpital Louis Mourier, Colombes, France

References

- 1 Akcam M, Kockar C, Tola HT et al. Endoscopic removal of an ingested pin migrated into the liver and affixed by its head to the duodenum. *Gastrointest Endosc* 2009; 69: 382–384
- 2 Iafrati MD, Fabry SC, Lee YM et al. A novel approach to the removal of sharp foreign bodies from the stomach using a combined endoscopic and laparoscopic technique. *Gastrointest Endosc* 1996; 43: 67–70
- 3 Shemesh E, Czerniak A, Hakerem D. Endoscopic removal of penetrating foreign bodies from the stomach. *Gastrointest Endosc* 1989; 35: 473–474
- 4 Le Mandat-Schultz A, Bonnard A, Belarbi N et al. Intrahepatic foreign body laparoscopic extraction. *Surg Endosc* 2003; 17: 1849

Bibliography

DOI 10.1055/s-0030-1255711

Endoscopy 2010; 42: E208

© Georg Thieme Verlag KG Stuttgart · New York · ISSN 0013-726X

Corresponding author

H. Duboc, MD

Emergency Endoscopy Ward
Department of Digestive Diseases
Hôpital Lariboisière
5 rue Ambroise Paré
75010 Paris
France
Fax: +33-1-47606072
henri.duboc@gmail.com