Gastric penetration of epicardial pacemaker leads 8 years after cardiac surgery

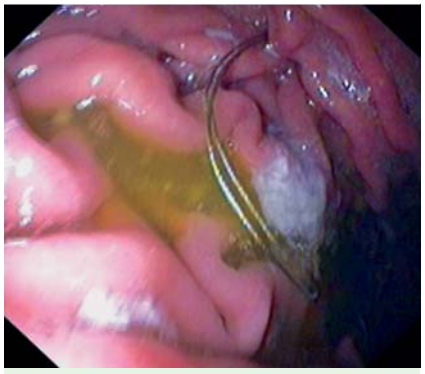

Fig. 1 Pacemaker electrodes penetrating through the gastric wall.

Fig. 3 Bending back the pacemaker lead to avoid further injury to the gastric mucosa.

Fig. 2 Chest and abdomen CT scan visualize the wires projecting towards the thoracic cavity.

Foreign bodies penetrating the gastric wall from the serosal side occur infrequently in endoscopic practice. A 79-year-old man with a 1-month history of weakness and black stool was referred to our department. He had undergone an aortic valve replacement and coronary artery bypass grafting in 2001. Laboratory findings showed anemia. Diagnostic gastroscopy revealed erosions on the anterior wall of the body of the stomach, in the middle of which two wires were detected penetrating into the gastric lumen (▶ **Fig. 1**).

The CT scan visualized the wires (suspected to be the electrodes of a temporary epicardial pacemaker implanted 8 years earlier) projecting towards the thoracic cavity (▶ **Fig. 2**).

The cardiac surgery consultation came to the conclusion that iatrogenic perforation of the gastric wall had occurred during insertion of the temporary epicardial pacemaker electrodes after the open heart surgery. Normally the redundant loop is brought out through the skin and removed by traction on the day before discharge. In our patient's case the percutaneous extraction was unsuccessful. Presumably the leads were led out to the skin through an accidental iatrogenic incision of the gastric wall and they dislocated into the stomach over the years. The tips of the leads injured the gastric mucosa leading to recurrent oozing bleeding. During the repeat gastroscopy one of the leads was removed with a loop, while the other was bent back with biopsy forceps to avoid further injury to the mucosa (▶ **Fig. 3**).

No complications occurred after the procedure.

Temporary pacing leads cause such complications such as infections, arrhythmias, and perforation [1,2]. Iatrogenic gastric perforation caused by pacing leads and diagnosed by endoscopy has not been reported previously. This case is also unusual because the leads were discovered 8 years after the unsuccessful removal. The chronic bleeding caused by the tips of the leads and the subsequent melena were managed endoscopically.

Competing interests: None

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References

1 *Reade MC.* Temporary epicardial pacing after cardiac surgery: a practical review: part 1: general considerations in the management of epicardial pacing. Anaesthesia 2007; 62: 264 – 271
2 *Del Nido P, Goldman BS.* Temporary epicardial pacing after open heart surgery: complications and prevention. J Card Surg 1989; 4: 99 – 103

Bibliography
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