An unusual cause of dyspepsia due to a retained epicardial pacing wire

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To the Editor,

Temporary epicardial pacing wire (TEPW) are frequently inserted in cardiac surgery. Although overall morbidity related to TEPW is low, complications related to the insertion, utilization, retrieval, and migration of these wires have been reported in the literature (1). In this report, we describe a case of gastric migration of a TEPW, which caused dyspeptic symptoms.

A 74-year-old man was admitted to our gastroenterology clinic for evaluation of worsening dyspeptic symptoms. Over the previous four months, he had suffered from continuous epigastric burning and pain. The patient had undergone coronary bypass grafting one year prior to the admission. Findings on abdominal examination were non-specific. On upper gastrointestinal endoscopy, a blue wire was identified that had penetrated the distal anterior wall of the gastric corpus (Figure 1). Retrieval of the foreign body was attempted but failed. Thoracic and abdominal computed tomography showed the wire, which originated from the right ventricle, passing through the sternocostal triangle, entering the abdomen, and penetrating the gastric wall (Figure 2). Consultation with cardiovascular surgery confirmed this wire to be a TEPW, which was cut at the surface of the skin after the bypass procedure. Although surgical intervention was planned, the patient did not provide consent for surgery.

Temporary pacing is a simple and efficient method for treating dysrhythmia in the postoperative period of cardiac surgery (2). TEPWs are placed on the ventricle, with or without including the atrium, to provide this pacing. The wires are passed percutaneously to the right of midline for atrial placement and left of midline for ventricular placement (1). When used, TEPWs are commonly removed on the fourth postoperative day with gentle transcutaneous traction. Rarely, the wires are cut at the surface of the skin, with the risk of retraction into the subcutaneous tissues due to the residual traction on the wire and/or increased coagulation rates. Thoracic complications during retrieval are the most common complications of TEPWs (2). Retained wires also carry the potential risk for infection. Major abdominal complications related to retained TEPWs have been rarely reported in the literature. Acute colonic injury, abdominal aortic migration, and colonic migration have been reported as TEPW-related abdominal complications (3-5). To the best of our knowledge, our case is the first report of gastric wall injury secondary to the migration of TEPW into the gastric cavity. We believe that these complications are mostly associated with improper placement of the TEPWs. The wire shouldn't be passed through the intraabdominal cavity to prevent this complication, which could be a cause of morbidity or mortality in patients following cardiac surgery.

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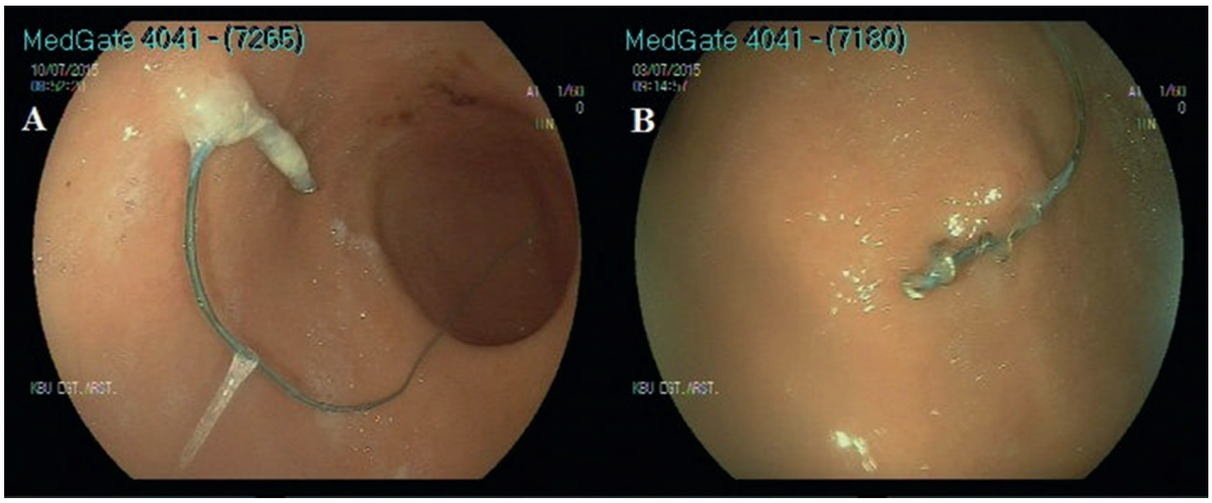

Fig. 1. — **Upper gastrointestinal endoscopy showing a penetrated wire in the anterior wall of corpus.**

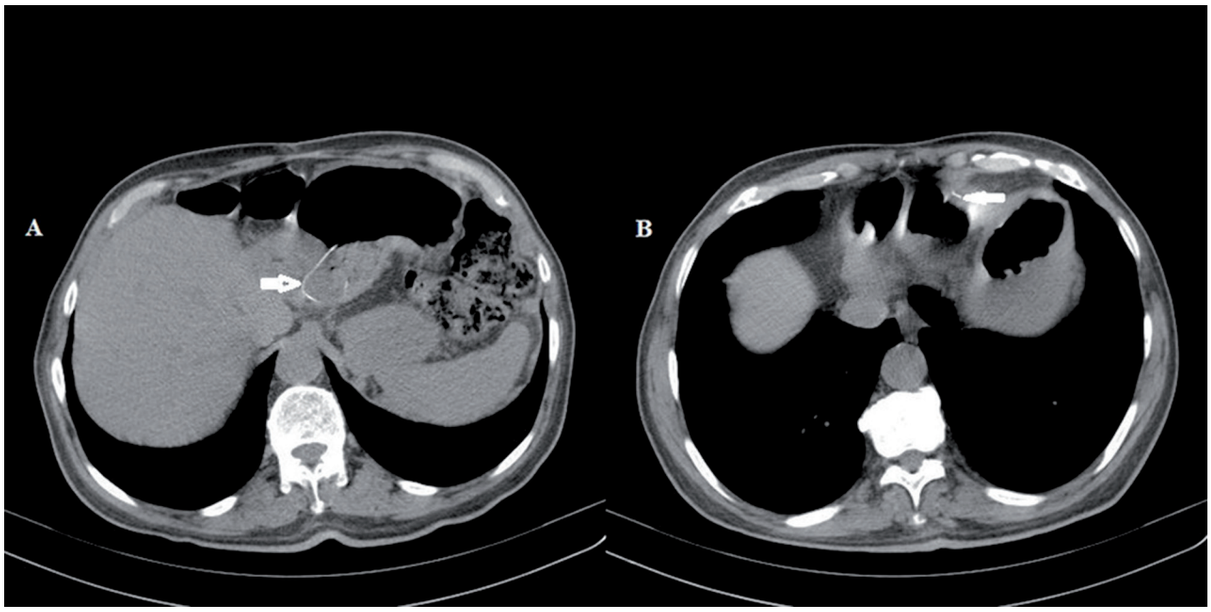

Fig. 2. — **Computed tomography images showing a wire located at the right ventricle, passing through the sternocostal triangle, entering the abdomen, and penetrating the gastric wall (arrowhead).**