

Gastric Perforation by Thoracic Wire Migration

Perfuração Gástrica por Migração de Fio Torácico

Nuno Andrez Pereira^{1*}, Ana Cláudia Paiva¹, Ana Rita Raimundo¹

*Autor Correspondente/Corresponding Author:

Nuno Andrez Pereira [nunopereira93@gmail.com]

ORCID iD: 0000-0001-5556-6472

PALAVRAS-CHAVE: Corpos Estranhos; Migração de Corpo Estranho; Perfuração Intestinal; Pacemaker/efeitos adversos

KEYWORDS: Foreign Bodies; Foreign-Body Migration; Intestinal Perforation; Pacemaker, Artificial/adverse effects

A 69-year-old man with sleep apnea, high blood pressure, dyslipidemia, and personal history of aortic valve replacement with a mechanical valve 12 years prior, presented with dyspepsia, nocturnal epigastric pain, and perceived abdominal “fullness”. He described ongoing symptoms for about 2 years, with an abrupt onset after a single episode of self-limited, severe epigastric pain, that appeared during anterior flexion of the trunk, while lifting a weight from the floor.

After showing no symptomatic improvement with proton pump inhibitors, an upper gastrointestinal endoscopy showed a foreign body (apparent metal wire), with one extremity adherent to the gastric body wall (Fig. 1). Endoscopic removal was unsuccessful.

Thoracic-abdominal computed tomography shows sternotomy wires from previous surgery, along with a metallic wire that extends from a subxiphoid location to a perigas-

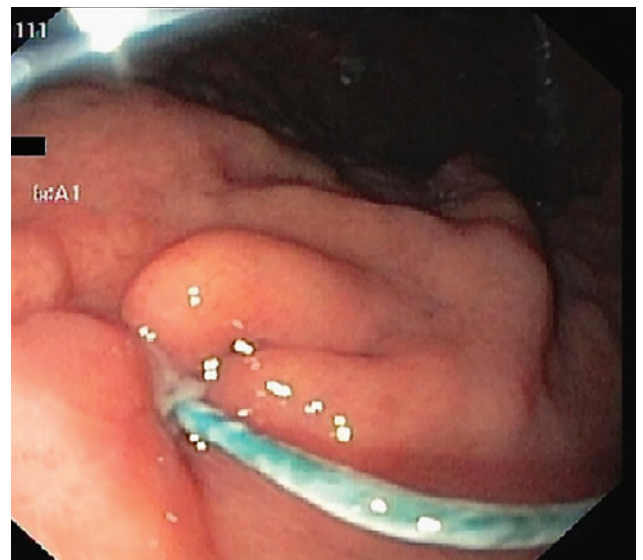


FIGURE 1. Upper gastrointestinal endoscopy shows a 50 mm metal wire, with millimetric thickness, perforating the anterior wall of the gastric body.

1. USF São João de Sobrado – ACeS Maia/Valongo, Maia, Portugal.

Recebido/Received: 2022/06/23 - Aceite/Accepted: 2024/01/21- Publicado online/Published online: 2024/02/12

© Author(s) (or their employer(s)) and Gazeta Médica 2024. Re-use permitted under CC BY-NC 4.0. No commercial re-use. © Autor (es) (ou seu (s) empregador (es)) e Gazeta Médica 2024. Reutilização permitida de acordo com CC BY-NC 4.0. Nenhuma reutilização comercial.

tric position, and perforates the anterior wall of the gastric body, with no signs of pneumoperitoneum or fluid collection (Fig. 2).

Migration of thoracic wires is a known, albeit rare complication of cardiac surgery.^{1,2} Although, frequently, this complication presents on a post-operative setting, cases of migrating temporary epicardial pacemaker wires, as well as migrating sternal fixation wires, have been previously reported, years after stability in the precordium.¹⁻³

After multidisciplinary evaluation, due to clinical and imagiologic stability, the patient's comorbidities, and no signs of local complication, a decision against an invasive and potential high-risk procedure to remove the wire was made, and an active surveillance approach has been adopted.

DECLARAÇÃO DE CONTRIBUIÇÃO /CONTRIBUTORSHIP STATEMENT

NP: Escrita do artigo e recolha de imagens

AP: Revisão de literatura e revisão do artigo

AR: Tradução e revisão do artigo

Todos os autores aprovaram a versão final a ser publicada

NP: Article writing and image collection

AP: Literature review and article review

AR: Translate and article review

Todos os autores aprovaram a versão final a ser publicada

RESPONSABILIDADES ÉTICAS

CONFLITOS DE INTERESSE: Os autores declaram a inexistência de conflitos de interesse na realização do presente trabalho.

FONTES DE FINANCIAMENTO: Não existiram fontes externas de financiamento para a realização deste artigo.

CONFIDENCIALIDADE DOS DADOS: Os autores declaram ter seguido os protocolos da sua instituição acerca da publicação dos dados de doentes.

CONSENTIMENTO: Consentimento do doente para publicação obtido.

PROVENIÊNCIA E REVISÃO POR PARES: Não comissionado; revisão externa por pares.

ETHICAL DISCLOSURES

CONFLICTS OF INTEREST: The authors have no conflicts of interest to declare.

FINANCING SUPPORT: This work has not received any contribution, grant or scholarship.

CONFIDENTIALITY OF DATA: The authors declare that they have followed the protocols of their work center on the publication of data from patients.

PATIENT CONSENT: Consent for publication was obtained.

PROVENANCE AND PEER REVIEW: Not commissioned; externally peer reviewed.

REFERENCES

1. Korompai FL, Hayward RH, Knight WL. Migration of temporary epicardial pacer wire fragment retained after a cardiac operation. *J Thorac Cardiovasc Surg.* 1987;94:446-7.
2. Radich GA, Altinok D, Silva J. Marked migration of sternotomy wires: a case report. *J Thorac Imaging.* 2004;19:117-9. doi: 10.1097/00005382-200404000-00011.
3. Koechlin L, Schneider R, Fourie L, Drews S, Eckstein FS, Reuthebuch O. The pitfall of gastric perforation by temporary pacemaker wires. *Asian Cardiovasc Thorac Ann.* 2020;28:290. doi: 10.1177/0218492320933771.

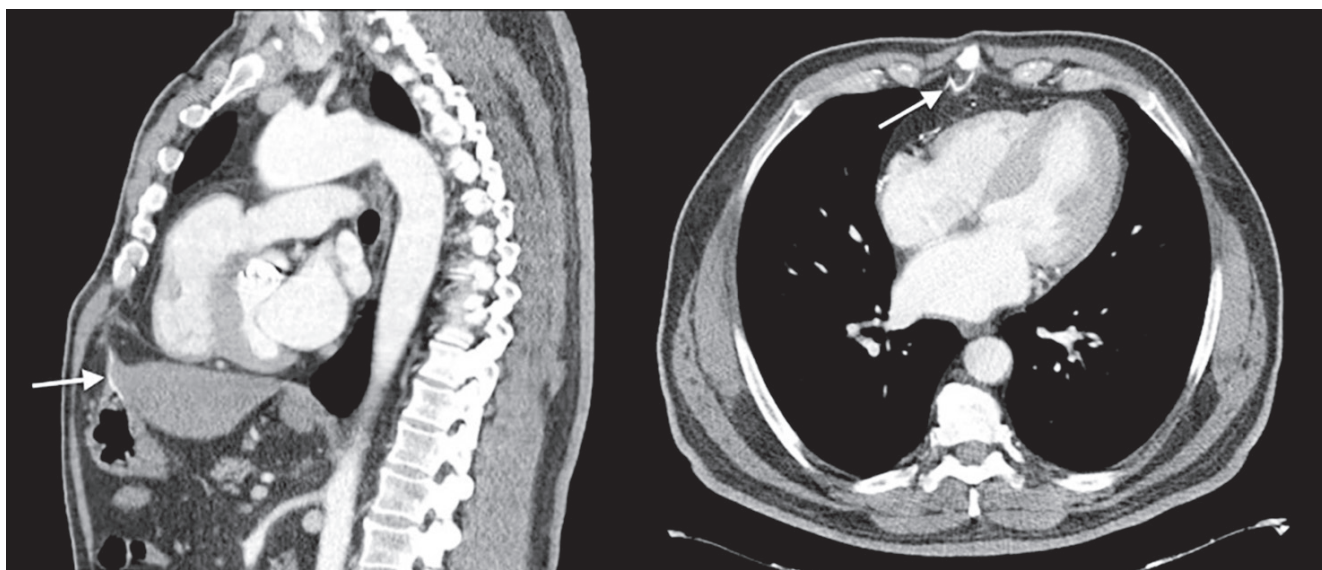


FIGURE 2. Thoraco-abdominal computerized tomography showing a metal wire (white arrow) penetrating the anterior gastric wall on a sagittal plane. Transverse plane showing the wire (white arrow) emerging from a retrosternal position.