

## Letters to the Editor

### Hiatal herniation following total gastrectomy

---

*Key words: Diafragmatic hernia. Gastrectomy. Esophagectomy.*

---

Dear Editor,

The authors present a case of early hiatal hernia (HH) that recurred a week after. Our purpose in this case report is to discuss briefly the potential cause and to enhance the importance of computed tomography (CT).

#### Case report

The patient was a 69-year-old male with advanced gastric cancer of the cardias who underwent total gastrectomy, lower esophagectomy, with antecolic Roux-en-Y reconstruction.

Thirty days after surgery, he presented to the emergency department with orthopnea. A CT scan reported that both small and large bowel were herniated into the right hemithorax (Fig. 1). Patient was admitted for urgent laparotomy with intraoperative findings of a transdiaphragmatic evisceration into the thorax. After hernia reduction, the hiatal defect was closed with polypropilene interrupted sutures.

On the 7<sup>th</sup> day, our patient started with dyspnoea again. We repeated the CT; images showed a relapse of abdominal content herniated into the thorax. Our patient was operated on again and, this time, a mesh of BioA<sup>®</sup> was fixed with interrupted sutures.

He was discharged 28 days after admission; a previous CT was done, with no findings.

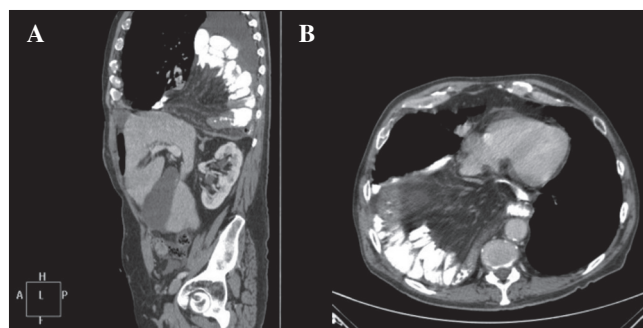


Fig. 1. A. Coronal CT. Small bowel into the right hemithorax. Patient on supine position. B. Axial image.

#### Discussion

Incidence of HH after esophagectomy ranges from 0.05% (1) to 19.4% (2) in some series.

The enlargement of the hiatus after esophagectomy makes patients prone to HH, with higher incidence after transhiatal esophagectomy (3), as it was our case. Patients with high body mass index (BMI) are less prone to have a HH postesophagectomy; our patient's BMI was 25. Another predisposing factor is the pressure gradient between thoracic and abdominal cavities.

Incarceration may appear sooner or later, with a wide range of clinical symptoms. Clinical suspicion based on patients background and early CT scan is very important in the detection of this pathology (3).

Primary repair may be done by reapproximating diaphragmatic crura. In the recurrence, the repair may require the use of meshes (3,4). Despite mesh repair, HH can recur (5).

María Azucena Gonzalo, Helen Almeida and Antonio Güemes

*Department of General Surgery, Esophagogastric Unit.  
Hospital Universitario Lozano Blesa. Zaragoza, Spain*

**References**

1. Yang Y, Yan W, Xiong H, et al. Analysis of 19 cases undergoing reoperation for complications following esophagectomy. *Zhonghua Wei Chang Wai Ke Za Zhi* 2014;17:492-4.
2. Sutherland J, Banerji N, Morphey J, et al. Postoperative incidence of incarcerated hiatal hernia and its prevention after robotic transhiatal esophagectomy. *Surg Endosc* 2011;25:1526-30. DOI: 10.1007/s00464-010-1429-8
3. Ganeshan DM, Correa AM, Bhosale P, et al. Diaphragmatic hernia after esophagectomy in 440 patients with long-term follow-up. *Ann Thorac Surg* 2013;96:1138-45. DOI: 10.1016/j.athoracsur.2013.04.076
4. Jeng KS, Huang CC, Lin CK, et al. Early incarcerated diaphragmatic hernia following right donor hepatectomy: A case report. *Transplant Proc* 2015;47:815-6. DOI: 10.1016/j.transproceed.2015.02.001
5. Kent MS, Luketich JD, Tsai W, et al. Revisional surgery after esophagectomy: An analysis of 43 patients. *Ann Thorac Surg* 2008;86:975-83;discussion 967-74. DOI: 10.1016/j.athoracsur.2008.04.098