



Massive Hiatal Hernia after Total Gastrectomy

Lucía Sanz Gómez*, Jorge Esteban Villarrubia, Elena Vida Navas, Juan José Soto Castillo, Javier Torres Jiménez, Pablo Álvarez Ballesteros, Juan José Serrano Domingo, Federico Longo Muñoz

Department of Oncology, Ramon y Cajal University Hospital, Spain

***Corresponding author:** Lucía Sanz Gómez, Department of Oncology, Ramon y Cajal University Hospital, Carretera de Colmenar Viejo, Km 9,100, 28034, Madrid, Spain

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Abstract

Background: Hiatal hernia is a very rare late complication after gastrectomy but it is potentially lethal.

Case Presentation: A 73 year-old patient with history of gastric cancer treated with perioperative chemotherapy and total gastrectomy five months prior, presented to the Emergency Department due to the rapid onset of abdominal symptoms and severe dyspnea. A CT-Scan was done with large hiatal hernia with small intestine loops in both hemithorax and vascular congestion. An urgent reoperation was performed.

Conclusions: An early diagnosis is crucial to reduce the mortality of this uncommon complication.

Keywords: Gastric cancer; Hiatal hernia; Postgastrectomy complications; Total gastrectomy

Abbreviations: CT: Computed tomography

Introduction

Gastric cancer is one of the most common cancers worldwide [1]. Nevertheless, the worldwide incidence has declined rapidly over the last years probably due to the recognition of certain risk factors. Despite this, it continues to be a lethal disease. The incidence varies within different geographic regions. There are highest rates in Eastern Asia, Eastern Europe and South America. Two different entities have been described: intestinal gastric cancer and the diffuse or infiltrative type. The first one is more common in males and older age groups. In the diffuse or infiltrative type there are no differences in sexes and it is more common in younger age groups, having a worse prognosis [2]. Surgical resection is the only potentially curative treatment. The choice of operation depends on the location, clinical stage and the histologic type. Total or partial gastrectomy with lymph node dissection is usually performed and multimodal treatment has had a favorable impact on the prognosis of patients [3]. Although complications after surgery are less common nowadays, the historical data suggest an average incidence of 30%. These complications are associated

with the chosen technique and can be divided in three types depending on the moment of establishment: immediate, early or late postoperative complications [4].

Case Report

We present the case of a 73 year-old man with a history of gastric cancer that was been treated with perioperative chemotherapy and total gastrectomy 5 months prior. The patient presented to the Emergency Department with sudden onset severe epigastric pain, nausea, vomiting and constipation. Regular intestinal meteorism was absent and the physical examination supported the diagnosis of acute abdomen. Laboratory studies showed an elevated C-reactive protein of 83 g/dl, lactate levels of 2,40 mmol/L and leukocytosis of 13300/uL with neutrophilia. Abdominal radiography and electrocardiogram were performed, with no pathological findings. Intravenous analgesia was administered, with no improvement in pain despite the use of opioids. Thus, an urgent thoracoabdominal CT scan was performed, revealing a voluminous hiatal hernia with small intestine loops in both hemithorax, mesenteric traction, edema and vascular congestion (Figures 1 and 2). Subsequently, laparoscopic surgery was performed, achieving the hernia reduction without any early surgical complications. The patient was discharged after nine days and five months later the patient remains asymptomatic.

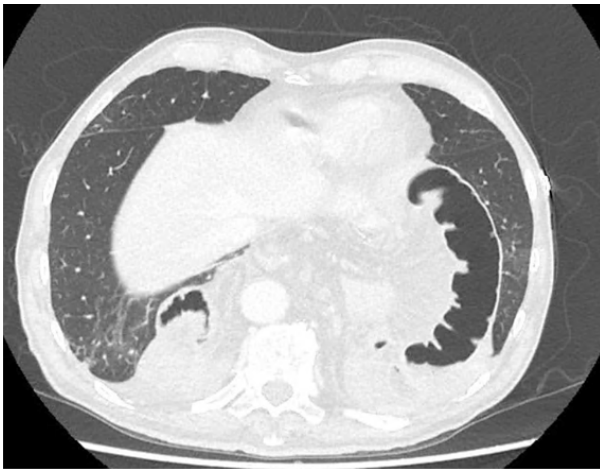


Figure 1: CT-scan with small intestine loops in both hemithorax.



Figure 2: Coronal view of CT-Scan where the herniation of intestinal loops are seen.

Discussion

Hiatal hernia is a kind of internal hernia and it is a very rare post-gastrectomy complication (approximately 0.01%) with few cases reported in the literature. They are more common as a complication after esophagectomy, having been described in 0.69% of the cases, and is a known complication after gastric

bypass [5]. Hiatal hernia usually presents with severe dyspnea, abdominal pain, emetic symptoms and intestinal ischemia. Due to them, it usually requires a reoperation [6]. In a multicentric cohort study, the 3-year incidence of internal hernia after gastrectomy performed for gastric cancer was 0.19%. The main reason for this increase in incidence seems to be the increased use of laparoscopic surgery, which produces decreased intraabdominal adhesions. In this study, internal hernia was observed only in patients with the Roux-Y reconstruction. Body weight loss also seems to be a notable risk factor for this complication [5].

Conclusion

Although massive hiatal hernia as a late complication of a total gastrectomy is extremely rare, early detection is crucial to reduce its mortality, so it should be considered in the differential diagnosis.

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Conflict of Interest

The authors declare no conflicts of interest.

References

1. Jemal A, Bray F, Center MM, Ferlay J, Ward E, et al. (2011) Global cancer statistics. *CA Cancer J Clin* 61: 69-90.
2. LAUREN P (1965) the Two Histological Main Types of Gastric Carcinoma: Diffuse and So-Called Intestinal-Type Carcinoma. an Attempt At a Histo-Clinical Classification. *Acta Pathol Microbiol Scand* 64: 31-49.
3. Cunningham D, Allum WH, Stenning SP, Thompson JN, Van de Velde CJH, Nicolson M, et al. (2006) Perioperative chemotherapy versus surgery alone for resectable gastroesophageal cancer. *N Engl J Med* 355: 11-20.
4. Samrat R, Naimish M, Samiran N (2020) Post-Gastrectomy Complications - An Overview. *Chirurgia (Bucur)* 115: 423-431.
5. Miyagaki H, Takiguchi S, Kurokawa Y, Hirao M, Tamura S, et al. (2012) Recent trend of internal hernia occurrence after gastrectomy for gastric cancer. *World J Surg* 36: 851-857.
6. Murata S, Yamazaki M, Kosugi C, Hirano A, Yoshimura Y, et al. (2014) Hiatal hernia following total gastrectomy with Roux-en-Y reconstruction. *Hernia* 18: 889-891.