

Case study

COMPLICATION OF A CONCOMITANT CURE OF A HIATAL HERNIA AT THE TIME OF SLEEVE GASTRECTOMY: A CASE REPORT

ABSTRACT

Bariatric surgery is the most optimal treatment for morbid obesity, diabetes and other metabolic disorders, as well as many other diseases. There is currently a consensus in bariatric surgery to systematically assess for hiatal hernia at the time of sleeve surgery and to repair it if present. We report the case of a 24-year-old patient who underwent sleeve gastrectomy with hiatal hernia repair as part of the surgical treatment of obesity at Sens Hospital. The surgical consequences were marked by the occurrence of food vomiting, which required surgical revision with removal of 2 stitches from the hiatal orifice.

KEYWORDS: sleeve gastrectomy, hiatal hernia, vomiting, postoperative, complication

1- INTRODUCTION

Bariatric surgery is the most optimal treatment for morbid obesity, diabetes and other metabolic disorders, as well as many other diseases [1].

The most common bariatric surgery in the United States is sleeve gastrectomy (SG). Texas accounts for 10% of bariatric surgery in the United States.

Currently, sleeve gastrectomy accounts for more than 65% of bariatric surgery in the United States [3];

Morbidly obese patients have a higher prevalence of hiatal hernia and gastroesophageal reflux disease (GERD) than the general population [4-5].

Postoperative GERD symptoms may be severe enough to warrant conversion to another procedure, such as laparoscopic Roux-en-Y gastric bypass (LRYGB), or even biliopancreatic diversion or duodenal switch. [6]

The sleeve has fewer post-operative complications and a lower risk of re-operation, although it is sometimes associated with the appearance of GERD early post-operatively [7].

There is currently a consensus in bariatric surgery to systematically assess for hiatal hernia at the time of sleeve surgery and to repair it if present. [8-9].

We report the case of an obese patient who underwent gastric sleeve surgery with concomitant hiatal hernia repair, in which the evolution was characterised by the occurrence of early postoperative vomiting related to an over-tightened hiatal orifice requiring hiatal release surgery.

II- CASE REPORT

This is a 24-year-old patient, followed since childhood for partial epilepsy, who was treated with Depakine from June 2002 to June 2005, then Trileptal.

At the age of 10, he began to put on weight, which led to an endocrinology consultation with follow-up and then a referral to the bariatric surgery consultation at the Sens hospital for surgical treatment, where a gastric sleeve was indicated.

The clinical examination revealed a very obese patient with a weight of 170 kg, height = 1.80 m, BMI = 52. Normally colored skin and conjunctiva with an enlarged abdomen (abdominal circumference = 120 cm).

Oesophagogastroduodenoscopy (OGD) reveals a hiatal hernia complicated by grade I oesophagitis on gastric biopsy.



Fig1: OGD showing hiatal hernia.

Biological test results: WBC = 6200, Hb = 15, TP = 341000, TP = 90, INR = 1, Na + = 140, K + = 3.7, total proteins = 71, urea = 7.1, creatinine = 92 μ mol/L,

The patient was admitted for surgical management of obesity and the pre-anesthetic visit was carried out.

The patient underwent laparoscopic sleeve gastrectomy with exploration revealing a large associated hiatal hernia of 5 cm neck with omental and gastric contents.

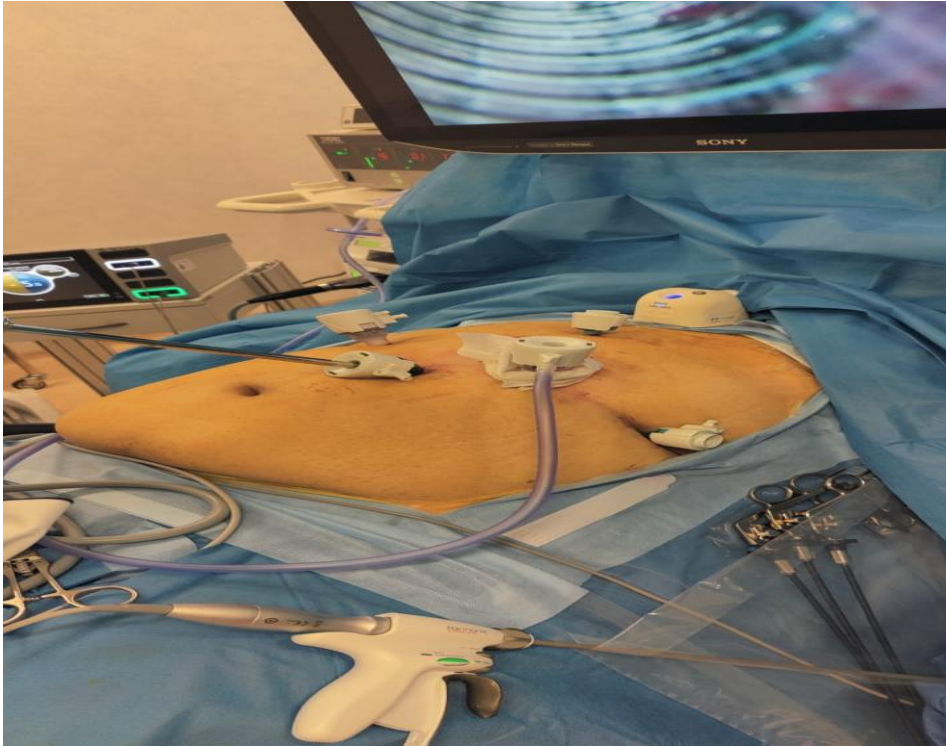


Fig 2. Position of the trocars: creation of a pneumoperitoneum through the orifice at the left hypochondrium.

After exploration, the contents of the hernia were returned to the abdominal cavity, the greater curvature of the stomach and the right oesophageal pillar were exposed and released, and the entire greater curvature of the stomach was dissected mechanically with forceps.

The hiatal hernia was repaired at 4 separate points using fine absorbable suture (Vicryl 4/0). The procedure took 2 hours 30 minutes with an estimated blood loss of 20ml.

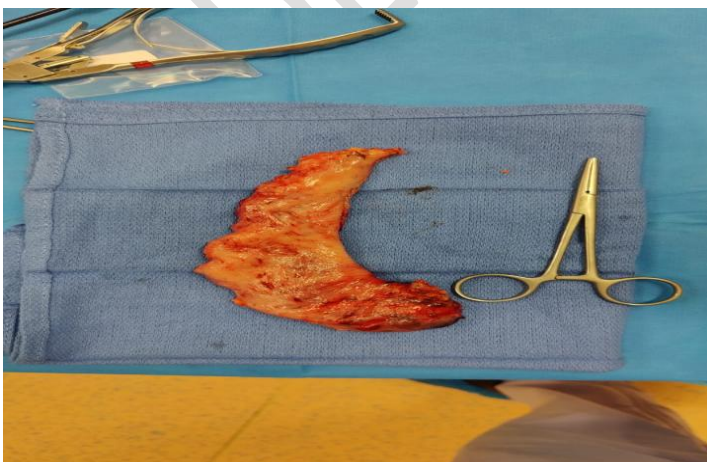


Fig 3: Operating specimen

The immediate postoperative course was uneventful and the patient was discharged on postoperative day D+2.

However, the patient was readmitted to the emergency department after 30 days due to early food nausea and vomiting.

A biologic evaluation was performed to assess the impact of vomiting and oesogastroduodenal transit.



Fig 4: Oesogastroduodenal transit presenting tight esophageal hiatus.

The resumption of the operation in our patient confirmed a very narrow hiatal orifice requiring the removal of 2 stitches at the level of the hiatal orifice.

The simple post-operative course was marked by the disappearance of vomiting and he was discharged on post-operative day 3 of the second operation.

III- DISCUSSION:

Several studies have reported the association of hiatal hernia with sleeve gastrectomy. Dakour Aridi HN et al in a study from 2010 to 2014 found 14% of patients benefited from sleeve gastrectomy + hiatal hernia repair [10].

Clap B et al also found 24.3% of patients undergoing sleeve gastrectomy + hiatal hernia repair in a study from 2013 to 2017 [11].

This has also been reported in some previous studies, with proportions ranging from 14 to 24% (2- 14- 15). Using MBSAQIP data, Docimo et al. found a repair rate of 21% for both gastric sleeve and hiatal hernia (12).

In our observation, hiatal hernia repair was performed at 4 separate points with a fine absorbable suture (Vicryl 4/0) with simple immediate follow-up. However, complications related to hiatal hernia repair have been reported in several studies.

Mithani RH et al reported early and late postoperative complications including gastroesophageal reflux, intra-abdominal haemorrhage, abscess formation, internal hernia, gastroenteric leak, gastric obstruction, fistula, dehydration, wall infection, gastric ulcer formation stenosis (13).

In our study, our patient presented with early food vomiting on postoperative day 30, which required re-operation to investigate and treat the cause.

It was a very tight hiatal opening during the hiatal hernia repair during the first procedure, for which we removed two sutures, with a simple follow-up.

CONCLUSION:

Postoperative vomiting following sleeve gastrectomy combined with hiatal hernia repair has a variety of causes and requires investigation (biological, radiological and surgical) and appropriate management depending on the cause.

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