GASTRIC NECROSIS WITH PERFORATION: A LATE COMPLICATION OF NISSEN FUNDOPLICATION

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BACKGROUND
A tight fundoplication can cause gastric dilatation because of the inability to vomit. If the intragastric pressure exceeds gastric venous pressure it can result in ischaemia and infarction of the gastric wall. Prompt diagnosis of acute gastric dilatation is mandatory to avoid gastric necrosis. Other causes of gastric dilatation include trauma, volvulus, anorexia and bulimia, diabetes, polypagia, acute infections and others.

METHODS

*Anamnèsis:* 56-year-old man admitted to the emergency room with acute-onset epigastric pain and persistent nausea for the past 4 hours. Nine years ago he underwent a laparoscopic Nissen-Rossetti fundoplication for GERD. The physical examination showed abdominal distention and tenderness.

*Computed tomography (CT):* Of the abdomen showed a massive pneumoperitoneum distributed diffusely throughout the abdomen, marked gastric distension with abundant content inside. Free intraperitoneal fluid and postsurgical changes in relation to Nissen fundoplication.

*Treatment:* emergency laparotomy

RESULTS

*Surgery:* surgical exploration of the abdomen showed free intraperitoneal fluid, gastric distension and areas of necrosis and perforation (localized in fundus and the gastric body). A total gastrectomy with esophagogastroduodenostomy was performed. The patient suffered a pulmonary embolism 8 days after surgery and was discharged at the 16th postoperative day.

*Pathology report:* gastric dilatation and two areas of ischemia and transmural necrosis with perforation and peritonitis.

CONCLUSION
A tight fundoplication can cause a gastric dilatation because of the inability to vomit. Although ischemic necrosis after extensive gastric dilatation is a very rare phenomenon; early diagnosis and treatment is mandatory to avoid major complications (gastric necrosis and perforation). If the necrosis is localized taking down of the fundic wrap and excision of the necrotic gastric wall may be possible; if massive or multifocal necrosis is present a total gastrectomy may be necessary.