

Giant Paraesophageal Hernia: A Rare Cause of Dysnea and Emetic Syndrome in the Elderly Patient

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Introduction

In general terms, protrusion of any abdominal structure other than esophagus into the thoracic cavity through a widening of the hiatus of the diaphragm is called hiatal hernia. It is really difficult to calculate the real incidence because it is asymptomatic in most cases, but it is estimated about 5/1000 in general population, being more common in 4th to 6th decade of life and in women, if we talk about paraesophageal hernia [1]. Even though the cause of this illness can include symptoms (like pyrosis, dyspnoea, dysphagia or vomits), the most frequently is asymptomatic. However, potentially dangerous complications, like gastroesophageal reflux, volvulus, gastrointestinal bleeding or esophageal shortening could occur. The diagnosis is based on the identification of an air-liquid level in posterior mediastinum in chest radiography and with barium study, using the axial computerized tomography when there is a suspicion of complication or giant hernia. In some cases, we use endoscopic processes. The current anatomic classification includes: sliding hiatal hernia (Type I); paraesophageal hernia (Type II); a combination of Types I and II, with both the gastroesophageal junction and the fundus herniating through the hiatus (Type III), and hiatal hernia with the presence of a structure other than stomach within the hernia sac or complicated hiatal hernia (Type IV) [2]. The first choice for the management is medical treatment (antacid like almagato or proton pump inhibitor for gastroesophageal reflux or analgesic for epigastric pain, for example), but when the symptoms are not controlled, the hernia is giant (with a high risk of complications) or it is complicated the patient needs surgical treatment [3]. This case report is about a woman with giant paraesophageal hernia and incoercible vomits.

Case Report

85 years-old woman, with personal antecedents of not known allergies, well controlled arterial hypertension and ischemic stroke with no sequelae. She had been hospitalized one month ago because she has suffered a right pertrochanteric hip fracture that needed surgical treatment. After that she has come up to three times the Emergency Services of our Hospital with ten-day symptoms of vomiting of food and mucus content, without blood. It didn't respond to oral and intravenous metoclopramide during the time she was in the Emergency Observation room. Due to the vomits were disabling, the persistence of those even if dispensable medication was retired (thinking it might be due to side effects of medication) and the absence of response to drugs, we decided the formal hospitalization for study.

She didn't have symptoms except for minimum effort dyspnea and occasional vomiting with large meals postprandial. The physical examination was not pathological. The blood analysis only showed a normocytic and normochromic anaemia. In the thoracic

roentgenogram was shown a retrocardiac air-fluid level, with no condensation imaging within the lung and no pleural effusion. The upper gastrointestinal series with barium revealed the existence of all stomach hernia through oesophageal hiatus in the thoracic cavity (Figure 1). To complete the study, we apply for a thorax and abdomen scanner. It confirmed the presence of a bulky intrathoracic hernia through the esophageal hiatus. The hernia was sheltering fundus and stomach body and the body and the tail of the pancreas (with vasculature and omentum) without signs of volvulus or ischemic affection. After controlling the symptoms and once intestinal obstruction was discarded, the patient was remitted for a regular surgical evaluation and treatment.

Discussion

Swallowing shortens the oesophagus due to the contraction of the lengthwise muscular fibres, so the gastroesophageal joint raise a few centimetres over the oesophageal hiatus, returning to its normal position after ending the swallowing through the traction of phrenoesophageal membrane. Over the years, the progressive degeneration causes a decrease in the membrane's elasticity and, this, with repeated swallowing, conduces to the rise of the gastroesophageal joint or herniation. This can be worsened by abdominal trauma, ascites, obesity, pregnancy or any other reason that increase intraabdominal pressure. Even is known a larger frequency in western countries because of a low-fibre diet that implies a more constipated bowel habit what leads to a more intraabdominal pressure during the defecation, as described in classic articles [4], and a high-fat diet that produce a retard in the gastric emptying with consequent gastric distension.

In particular Type III hiatal hernia, for being the rarer (a 5% of all) and due to its asymptomatic course in most patients, is difficult to diagnose. In some series it reaches up to 25%, which together with it can be the last situation of a sliding hernia it involves the delay of the diagnosis and the therapeutic approach [5]. When it produces symptomatology, it includes pyrosis, regurgitation, retrosternal postprandial pain, dyspnoea or vomits, like our case report, which can make worse the hernia due to "Valsalva's manoeuvre".

In the anteroposterior and lateral thoracic roentgenogram can demonstrate a retrocardiac air-fluid level, before which we must consider the differential diagnosis with mediastic abscess, necrotic tumour, bronchogenic cyst, Bochdalek hernia or retrosternal interposition of large bowel. Therefore, in spite of the imaging suggests hiatal hernia, it must be confirmed with upper gastrointestinal series with barium, keeping the scanner for giant hernia which can involve other viscera or the clinical suspect of complications [6]. Another

possible option is upper endoscopy if we consider digestive haemorrhage or pH metry in case of gastroesophageal reflux.

Although we know that in Type III hiatal hernia there is controversy about the surgical indication because the high rate of recurrence in middle-term [7], in case it is asymptomatic surgery its current use to prevent future complications that demand surgery (incarceration, strangulation or, like our case, high risk of acute pancreatitis and mesenteric ischemia due to the content of the hernia sac), which morbi-mortality is near 20% [8], as it occurs in elderly people with associated pluripathology. The laparoscopic approach means and extraordinary option facing classical open surgery, with shorter postsurgical staying and lower postsurgical morbidity [5].

Thus, due to the degeneration processes associated with age, explain why hiatal hernia is more common in elderly patients. We must consider this disease in the presence of the symptoms that seems like the described ones and compatible radiographic findings to outline an adequate therapeutic approach to prevent future potentially dangerous complications.

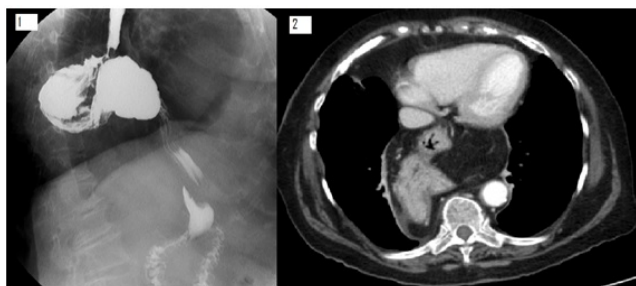


Figure 1: 1. Whole Body gastric herniation through oesophageal hiatus in the thoracic cavity. 2. Bulky intrathoracic hernia whose content includes three quarters of stomach, the body and the tail of the pancreas, with its vasculature and omenta.

References

1. Peters JH, DeMeester TR (1997) Gastroesophageal reflux and Hiatal hernia. Maingot's Abdominal Operations 10th Edtn. Appleton and Lange 787-842.
2. Díaz MS, Martínez AA, Díaz OP, Martínez GN, Rodríguez B et al. (2006) Hernia de hiato mixta gigante con inclusión de colon transverso. Rev Esp Enferm Dig (Madrid) 98: 391-395.
3. Benito FGS, Carneros JAM, Jiménez CP, Martínez MA, Torres JS, et al. (2003) Disnea y anemia en relación con herniación de estómago y ángulo esplénico de colon a través del hiato esofágico. An Med Interna 20: 328-329.
4. Burkitt DP, James PA (1973) Low residue diets and hiatus hernia. Lancet 2: 128-130.
5. Pagán E, Llabres M: Hernias hiato mixtas (2008) Resultados a medio plazo de la corrección laparoscópica. Seclaendosurgery.com (en línea), no. 23. Disponible en Internet. ISSN: 1698-4412.
6. Killeen KL, Mirvis SE, Shanmuganathan K (1999) "Helical CT of diaphragmatic rupture caused by blunt trauma." Am. J. Roentgenol 173: 1611-1616.
7. Targarona EM, Bendahan G, Carmen C, Garriga J, Trias M (2004) Mallas en el hiato: una controversia no solucionada. Cir Esp 75: 105-116.
8. Geha AS, Massad MG, Snow NJ, Baue AE (2000) A 32-year experience in 100 patients with giant paraesophageal hernia: the case for abdominal approach and selective antireflux repair. Surgery 128: 623-630.