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Case Report

Paraesophageal Hernia: An Unusual Cause for the Recurrent Episodic Cause of Dysphagia, Vomiting and Severe Weight Loss

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Abstract

The gastro-oesophageal junction lies at the level of the diaphragm in a paraesophageal hernia, and a piece of the stomach pushes into the chest region next to the oesophagus. It is rare and often presents with no symptoms. Pain and difficulty swallowing are felt when the hernia is significant, as in our case, or strangles the stomach. A 34-year-old male patient presented to our gastroenterology clinic with GERD, dysphagia, repeated vomiting and nausea, and weight loss, but with a good appetite for 5-month duration. Barium meal showed esophageal contractions and stenosis in the gastroesophageal junction. Upper endoscopy showed paraesophageal hernia, esophagitis, severe fundal erosion, and food remnants. This report reviews and discusses this type of hernia.

Keywords: Paraesophageal hernia; Upper endoscopy; Hiatal hernia

Introduction

A unique type of hernia called a hiatal hernia occurs when the stomach migrates across the diaphragm's esophageal hiatus. Hiatus hernia is a common condition, and 95% of cases are of the sliding variety, with 5% being of the paraesophageal variety [1].

The presence of a paraesophageal hernia frequently goes unnoticed. It is a particular kind of hernia that does not impair swallowing but persists in the chest region. When the stomach is strangled by the hiatus or when there is a significant paraesophageal hernia, the oesophagus may be compressed, which in turn alters how food enters the stomach and causes pain and discomfort. This may cause food to clump together after swallowing in the oesophagus. Due to irritation from the food or stomach acidity, it may also result in the development of ulcers in the herniated stomach. Large paraesophageal hernias like the one we have are uncommon.

Case Presentation

A 34-year-old male patient presented to our gastroenterology clinic with marked GERD, dysphagia, repeated vomiting and nausea, and weight loss but with a good appetite for 5-month duration. He sought prior medical evaluation, with a history of normal previous upper endoscopy. He received only PPIs and prokinetics with no significant improvement. A barium meal was done, showing esophageal contractions and stenosis in the gastro-esophageal junction (Figure 1).

Then, upper endoscopy was performed in the left lateral decubitus position under local sedation Paraesophageal hernia was found with esophagitis, severe fundal erosion, and food remnants (Figure 2). MSCT chest and MRI abdomen were requested.

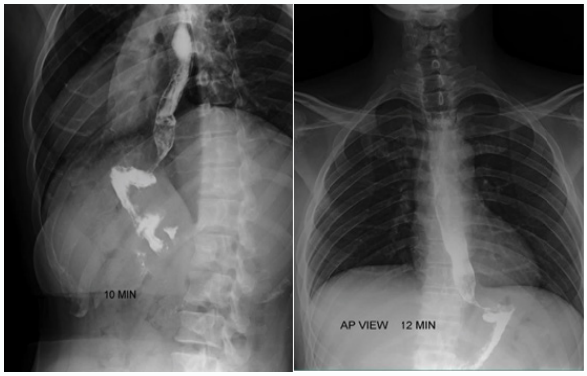

Figure 1: Barium meal demonstrating GEJ stenosis.

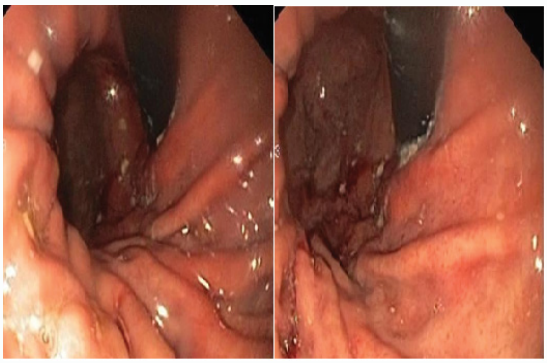

Figure 2: Show a retroflexion view with paraesophageal hernia and fundal erosion.

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However, the large size of the hernia raises the question of why the symptoms began only a few months ago. This can be explained as the patient was overweight and he engaged in a weight reduction program one year ago. He lost about 20 kg (115 kg - 95 kg) and then his symptoms started for the first time as the hernia was able to be easily filled with the stomach contents, which migrated into the hernia in the chest, compressing the esophagus and causing dysphagia.

Discussion

The digestive system is frequently affected by the disorder known as diaphragmatic herniation [1]. The right crus of the diaphragm widen between both slings, allowing the stomach and/or other intra-abdominal stuff to protrude into the chest cavity [2]. Hiatal hernia can be classified into four anatomical patterns [3]. The gastroesophageal junction migrates above the diaphragm in a sliding or type I hiatal hernia, which is by far the most typical kind and closely related to gastroesophageal reflux [2]. Only 5% of hiatal hernias are Type III, or paraesophageal hernias, in which the gastric fundus herniates next to an esophagogastric junction that is normally positioned. Combining both kinds, I and II,type III hernia.

These hernias frequently have a substantial size and occupy a significant portion of the thoracic cavity as a result of the continual expansion of the hiatus and herniation [4]. Type IV hernias are more complicated than Type III hernias because the small bowel or colon have completely migrated into the hernia sac [2,4-6]. Para-esophageal hernia is strongly associated with obesity Aging, tobacco abuse, kyphosis, and obesity are all associated with hernia formation [5].

Surprisingly, the majority of these hernias frequently have no symptoms, but a few dos. These include gastroesophageal reflux, chest discomfort or heartburn that does not go away with an antacid, difficulty swallowing, and shortness of breath, abdominal pain, nausea, vomiting, and indigestion [6]. Only about a third of the patients may have life-threatening consequences such a stomach perforation, an acute volvulus with blockage, or bleeding [7].

Larger size, advanced age, and incarceration are risk factors for para-oesophageal hernia perforation. Such a presentation and risk factors must be taken into consideration in order to reduce the likelihood of a delayed or missing diagnosis. Around 1% of paraoesophageal hernia patients are predicted to need emergency surgery each year [8,9].

The diagnostic tests are typically recommended once the illness has symptoms. Following a thorough case history and physical examination, the diagnosis is made. The patient is asked to cough as the area is physically checked to check for hernias. During imaging procedures like a chest X-ray, Computed Tomography (CT), or magnetic resonance imaging, a paraesophageal hernia may unintentionally be discovered. Tests with a specific focus, such the barium swallow test Patients who exhibit symptoms might have an upper endoscopy or a barium swallow. Manometry can be used to assess the disease's severity and decide on therapies. Surgery planning may involve the use of a CT scan [10].

The majority of paraesophageal hernia patients go untreated and without a diagnosis. Sometimes the symptoms are confused with those of other illnesses like acid reflux and heartburn. In severe circumstances, paraesophageal hernia can cause excruciating pain and suffering, necessitating urgent medical care. Surgery is typically advised for repair. A delay in surgery can result in constriction or strangulation, which may completely cut off the area's blood supply [11].

Laparoscopic (minimally invasive) surgery has recently taken the role of traditional surgery due to its benefits. Through a tiny incision, a laparoscopic device is inserted into the abdomen (5 mm to 10 mm). The stomach will be repositioned during surgery, and the hiatus will be strengthened. The laparoscope assists the surgeon in doing the surgery by transmitting a view of the interior organ. The less invasive nature of the procedure, less risk of infection, minimal postoperative discomfort, low likelihood of scarring, and quick recovery are its benefits [12,13].

Elective surgery to treat gastroesophageal reflux disease is significantly simpler than surgery to treat paraesophageal hernias. Following elective paraesophageal repair, the majority of series indicate death rates of 1.7% to 2.5% [14,15].

Conclusion

A rare ailment called a paraesophageal hernia frequently stays untreated until it manifests symptoms. Since the majority is asymptomatic, the actual prevalence of these paraesophageal hernias in the general population is unknown. It is frequently mistaken for other digestive disorders including GERD. Abdominal pain, acid reflux, swallowing issues, and shortness of breath are among the symptoms.

Physical examinations are frequently used to make diagnoses, sometimes in conjunction with specialized testing like endoscopy and the barium swallow test. Dietary and lifestyle changes are part of the treatment for this illness. Drugs are useful for reducing acidity. Laparoscopic surgery is an option in complex instances. Providing the illness is identified and treated promptly, the prognosis is excellent.

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