

Incidental Finding of Phytobezoars within Gastric Diverticulum: Diagnosis and Treatment

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Introduction

Gastric diverticula are equally distributed between male and female patients, and approximately 82% of cases occur in individuals over 40 years of age, with approximately 4% of cases occurring in patients under 20 years of age [1]. Bezoars, which are intraluminal hard masses or concretions in the gastrointestinal system caused by the accumulation of indigestible ingested materials, are most commonly found the persimmons, pineapples, prunes, celery and coconut fiber are representative causes of phytobezoars [2,3].

Report of Case

A Female patient, 56 years old, with chronic dyspepsia with clinical manifestation for about 20 years. She underwent an upper digestive endoscopy that showed mild enanthematic antrum gastritis and a gastric diverticulum with a medium volume phytobezoar inside (Figure 1).

The biopsy performed at endoscopy showed the presence of the bacterium *Helicobacter Pylori*. Diverticula are classified as true, which are constituted by all layers of the gastric wall and are of congenital origin, and false, which are those that do not have the muscular layer, being acquired. About 70% of them are congenital (true), asymptomatic and located in the posterior wall of the gastric fundus, while acquired (false) diverticula are more frequently located in the antrum region, and may be associated with obesity, chronic cough, pregnancy, peptic ulcer, acute pancreatitis or gastrointestinal surgery [4]. The most common complications of phytobezoars are gastric ulceration and intestinal

obstruction; they can also be asymptomatic or present with a variety of symptoms [5]. Diagnosis varies according to the method applied, ranging from 0.02% in autopsy-based studies, to 0.04% in contrast radiographic studies of the upper gastrointestinal tract, and from 0.01-0.11% during a gastrointestinal endoscopy performed by another indication.



In 75% of cases, the diverticulum is located on the posterior wall of the fundus, being generally close to the esophagogastric junction [4]. They are solitary and have a small orifice and a short body, although they can reach a considerable size, ranging from 2 cm to 10 cm [6]. The second most common location is the prepyloric area, with about 15% of occurrences located along the greater curvature [7]. Most cases of gastric diverticula are

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asymptomatic, probably due to their posterior location and broad base. However, depending on the size of the diverticula, patients may have nonspecific symptoms such as abdominal pain, vomiting, weight loss, iron deficiency anemia or complications such as bleeding, gastroesophageal reflux and perforation. Dyspepsia and vomiting are less frequently reported¹. Upper digestive endoscopy is the main diagnostic test, and contrasted abdominal computed tomography is recommended as a complementary diagnostic method. Surgical treatment, which basically consists of resection, is indicated in the case of large diverticulum or those larger than four centimetres due to the greater risk of perforation, haemorrhage and malignancy [8,9]. This indicates that chemical therapy could play a crucial role for the complete removal of phytobezoars in selected cases. Most patients received endoscopic combined with chemical therapy as the first approach. Endoscopic devices, including endoscopic polypectomy snares, forceps and basket for fragmentation were also used to treat phytobezoars. These patients had larger sized phytobezoars and more comorbidities than who received only chemical therapy, indicating that endoscopists would recommend endoscopic fragmentation for patients.

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