



Rare tumor as a cause of dyspepsia

Tumor infrecuente como causa de dispepsia

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Dispepsia
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rayos X

Abreviaturas

EGD: upper digestive video endoscopy; **VCC:** video colonoscopy; **MDCT:** computed tomography multi-sensor; **IV:** intravenous; **GIST:** gastrointestinal stromal tumor; **PPI:** pump inhibitors of protons; **IFP:** inflammatory fibroid polyp.

Summary

The gastric inflammatory fibroid polyp is a rare clinical-pathological entity, representing an incidence of 0.1% of all gastric polyps. It most frequently affects adults in a wide age range, and its incidence peak is between the sixth and seventh decades of life. The lesions remain predominantly asymptomatic and are detected incidentally on endoscopy or imaging for unrelated causes. Occasionally, fibroid polyps cause symptoms due to their large size causing gastric outlet obstruction, or due to mucosal erosion presenting with overt or occult upper gastrointestinal bleeding.

Resumen

El pólipo fibroide inflamatorio gástrico es una entidad clínico-patológica rara, la cual representa una incidencia del 0,1 % de todos los pólipos gástricos. Con mayor frecuencia afecta a adultos en un amplio rango de edad, cuyo pico de incidencia es entre la sexta y séptima décadas de la vida. Las lesiones son predominantemente asintomáticas y se detectan incidentalmente en la endoscopia o en las imágenes realizadas por causas no relacionadas. Ocasionalmente, los pólipos fibroides provocan sintomatología, ya sea por su gran tamaño que causa obstrucción de la salida gástrica, o por la erosión de la mucosa que se presenta con sangrado gastrointestinal superior manifiesto u oculto.

Presentation of the case

The patient is a 76-year-old man with a history of well-managed atrial fibrillation. He consulted the emergency department for epigastralgia and dyspeptic symptoms of four months of evolution, associated with altered evacuatory rhythm; physical and laboratory examinations were normal. In the initial surgical evaluation, oral pharmacological treatment with PPI was considered and MDCT with EV contrast medium was ordered (Figures 1-3).

Case solution

The CT images showed a 21 mm rounded image protruding into the gastric antrum lumen. The finding was interpreted as a probable gastric tumor (GIST) and digestive endoscopy was performed, showing a submucosal tumor in the antrum region. Endoscopic resection was attempted, but the edges were found to be compromised, so surgery was performed. The patient was operated, was discharged and is being followed up, with good postoperative evolution.

The pathological anatomy reported mesenchymal cells, tapered, with typical characteristics, fibroblast proliferation, neoformation vessels, abundant inflammatory infiltrate of eosinophilic predominance and formation of reactive lymphoid follicles. Immunolabeling was performed and was positive for CD34 in the described cells and negative for the following labels: S100, ALK1, CD117 and AML. The lesion is compatible with inflammatory fibroid polyp.

Discussion

Inflammatory fibroid polyp, also known as Vanek's tumor (who described it in 1949), is a rare type of mesenchymal tumor of submucosal origin of the gastrointestinal tract. Sporadic cases have been published, but have not made it possible to establish a real incidence of this entity (1). It represents one of the benign gastric tumors with a lower frequency of presentation, documented in some series from 1 to 4% (1). It has a peak incidence after the sixth decade of life, it predominates in males and its malignization is exceptional (2).

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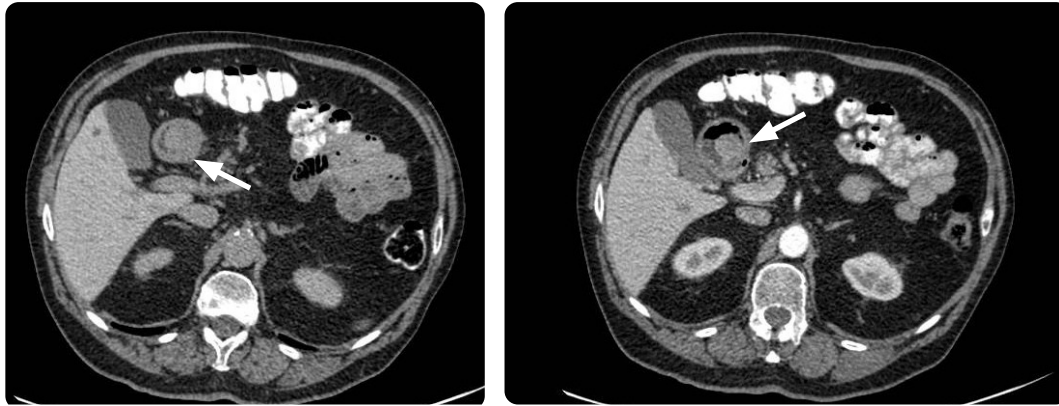


Figure 1. Axial CT. a) With oral contrast medium and b) intravenous. Nodular image of smooth borders, discretely lobulated, endophytic (arrow), located in the antrypiloric region, which presents enhancement in arterial phase after the administration of EV contrast medium.

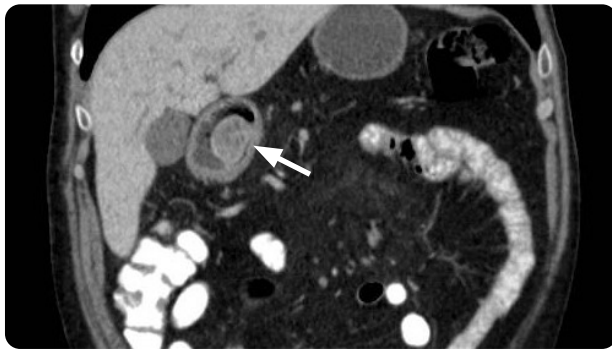


Figure 2. Coronal CT coronal section with oral and intravenous contrast medium in arterial phase. Endophytic nodular image in the stomach, with enhancement in arterial phase after administration of EV contrast.

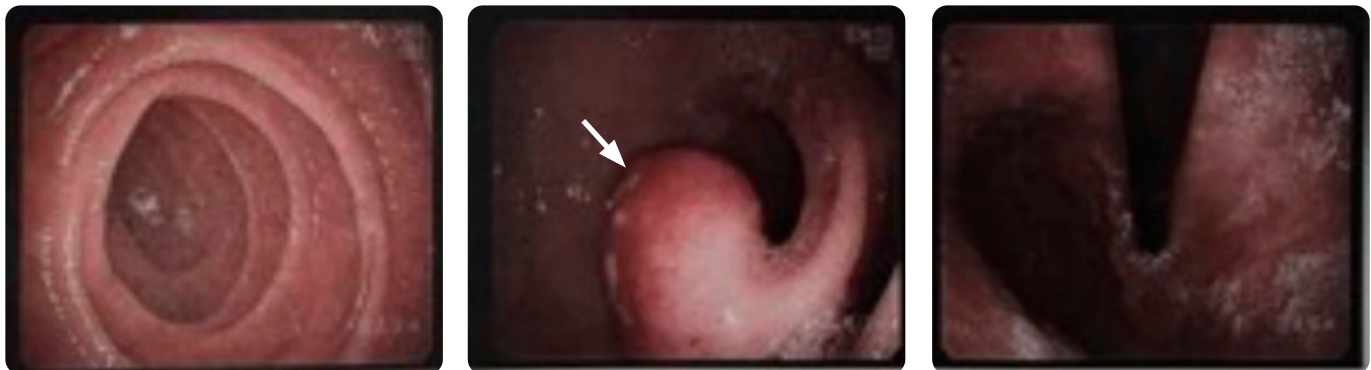


Figure 3. Endoscopic view of the lesion.

This pathology can affect part of the gastrointestinal tract, and the gastric location is the most frequent (80 %); it is generally associated with *H. pylori* gastritis, gastric ulcer, adenoma or carcinoma. Eighty % of these tumors are located in the antrum and the remaining 20 % in the body and cardia. The largest tumor size currently documented and described is 12 cm (1).

Its cause is unknown. There are several hypotheses to explain its pathogenesis and the most accepted is the inflammatory theory, according to which the inflammatory fibroid polyp is formed by an excessive reaction of the tissue to damage exerted on the gastrointestinal mucosa. It is believed that luminal factors (bacterial, chemical or mechanical) act on mucosal fibroblasts and myofibroblasts through defects in the epithelium, stimulating their growth. It has been postulated that

Helicobacter pylori infection may play an important role, through the secretion of growth factors by the microorganism itself, epithelial cells and mucosal myofibroblasts (1, 2).

Vanek's tumor is usually asymptomatic. The initial clinical picture may have dyspeptic symptoms such as abdominal pain, nausea and vomiting, as well as anemia, weight loss and/or upper gastrointestinal bleeding. Obstructive symptoms have been described due to the rapid growth of the lesion, which can exert a valvular pressure effect on the pylorus. Upper gastrointestinal bleeding is a consequence of ulceration of the polyp (2).

This entity can present as a tumor, so its differential diagnosis is gastrointestinal stromal tumors (GIST) and other benign mesenchymal tumors (2).

The typical endoscopic appearance is a polypoid lesion, sessile or pedunculated, lined by normal mucosa, located in the antrum or prepyloric region and sometimes depressed or ulcerated. They are usually single.

Referring to their size, they can have three stages that are considered evolutive: nodular (< 0.4 cm), fibrovascular (≥ 0.4 cm and ≤ 1.5 cm) and sclerotic or edematous (> 1.5 cm), each with different histopathologic findings. In this case, the polypoid lesion was sessile, approximately 15 mm in diameter, single and umbilicated at its cusp relating its size to the evolutionary stage of the lesion (fibrovascular), so there were no differences with the literature reviewed.

Histologically, these tumors are characterized by a proliferation of spindle and stellate cells in the lamina propria or in the submucosa, often in a perivascular arrangement, and the presence of eosinophils with an “onion web” appearance is striking (1, 2). Curative treatment is removal of the polyp and does not require additional treatment. In some cases polypoid lesions may recur if removal is not complete (3).

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