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Inflammatory fibroid polyp (Vanek's tumor) of the gastric antrum: is treatment always mandatory?

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Inflammatory fibrous polyp(Vanek's tumor) of the gastric antrum.is treatment always mandatory?

INTRODUCTION: *Inflammatory fibroid polyp (IFP), also known as Vanek's tumor, is a rare polypoid lesion of the gastrointestinal tract. A recently observed case led us to review the literature, with the aim to discuss the management of asymptomatic gastric IFPs.*
CASE REPORT: *A 71-year-old man was endoscopically diagnosed as having a polypoid lesion located in the gastric antrum. Histopathological and himmunoistochemical studies of endoscopic biopsies revealed an IFP. Endoscopic resection was proposed, but the patient refused such a treatment because he was asymptomatic for his polyp. After three years the patient is asymptomatic and the endoscopic surveillance follow-up has showed no evidence of growth nor other modifications of the gastric IFP.*
DISCUSSION: *Gastric IFPs are benign polyps of unknown etiology which sometimes pose problems of differential diagnosis with GISTs, and various mesenchymal tumors. Although gastric IFPs are benign lesions usually asymptomatic, most of the cases reported in the literature have been treated by endoscopic or surgical excision. In the case described herein, no modifications of the polyp were observed at endoscopic follow-up.*
CONCLUSION: *This case description suggests that removal of gastric IFPs, either by endoscopic or surgical approach, may not be mandatory in asymptomatic patients.*

KEY WORDS: Inflammatory Fibroid Polyp, Stomach, Vanek's tumor

Introduction

Stomach polyps are a common finding in endoscopy practice occurring in about 2% of upper tract endoscopies, many of them being asymptomatic lesions and incidentally discovered. They can be classified into two main categories: non-neoplasic polyps and neoplastic polyps. The former category includes hyperplastic polyps, inflammatory fibroid tumors (IFPs), xanthoma/xanthelasma, hamartomatous polyps of Peutz-Jeghers type, juvenile polyps, gastric polyps in Cowden disease and Cronckite-Canada disease. [1]
We report a recently observed case of gastric IFP, with the main aim to discuss the non operative management of this rare condition.

Case Report

A 71-year-old man with chronic anemia was referred to our endoscopic service for evaluation of occult gastrointestinal bleeding. His previous medical history included cardiac mechanical valve replacement and a

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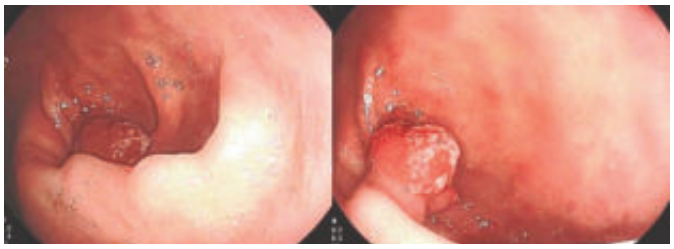

Fig. 1: Endoscopic view of the IFP located in the gastric antrum, showing a semi-pedunculated polyp with superficial erosions.

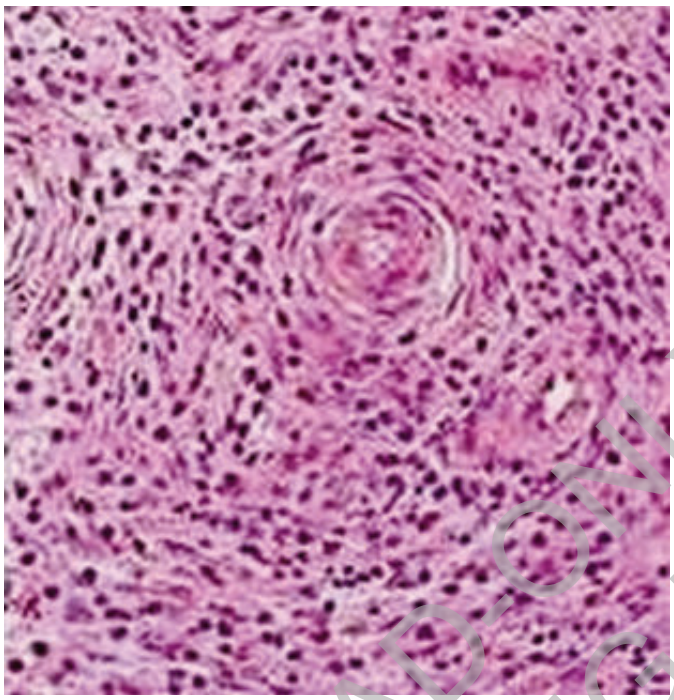

Fig. 2: Morphologic features of IFP. Fibroblastic cells disposed in the typical "onion skinning appearance" and inflammatory cells infiltrate, especially. (H&E stain: 400×)

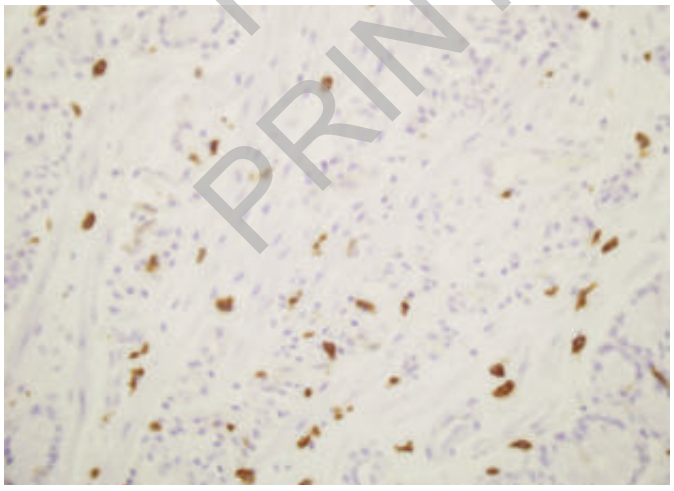

Fig. 3: Immunohistochemistry analysis showed negativity in for CD117. (40×)

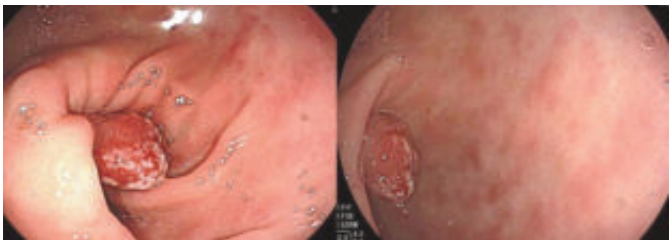

Fig. 4: Endoscopic assessment at three-year follow-up. The IFP remained unchanged in size and endoscopic aspect.

recent episode of endocarditis with septicemia due to valve infection. He reported no abdominal pain and changes in bowel habits. Laboratory findings showed a hemoglobin of 9.7 g/dL, and hematocrit of 39%. Colonoscopy and upper GI endoscopy were carried out, the former revealing a polyp of 2.5 cm of diameter in the sigmoid colon with signs of recent bleeding, which was endoscopically removed. Histological examination showed a villous adenoma with low to moderate dysplasia. Upper GI endoscopy demonstrated the presence of a semi-pedunculated polyp (type O-I polypoid lesion according to the the Paris endoscopic classification [2]) with signs of superficial erosion, suspected for gastrointestinal stromal tumor (GIST), located in the gastric antrum (Fig. 1). On microscopic examination, multiple biopsy specimens revealed hyperplastic fibroblastic cells surrounded by lympho/granulocytes (Fig. 2). On immunohistochemistry, the epithelial and stromal cells showed cytoplasmic positivity for CD34 and negativity for both CD117 and S-100 (Fig. 3). All these features were consistent with the diagnosis of IFP. Thus, the patient was offered endoscopic removal of the gastric polyp, but he refused the procedure principally because no symptoms related to the presence of the polyp were evident.

The sigmoid polypectomy led to rapid resolution of his anemia.

After three years the patient is asymptomatic, his hemoglobin levels are normal, and the endoscopic surveillance follow-up has showed no evidence of growth nor other modifications of the gastric IFP (Fig. 4).

Discussion

IFPs, also known as Vanek's tumors from the author who first described them in 1949 [1], are uncommon polypoid lesions that can develop in various parts of the gastrointestinal tract, most commonly the stomach, followed by the small bowel and colon. More than 70% of gastric IFPs are localized in the antral region [3]. IFPs represent 0.1% of all gastric polyps [4], and are usually discovered in the 5th - 7th decade of life [3,5]. One of the latest review found about 300 cases of gastric IFPs published in the literature up to 2014 [6].

On endoscopic examination, IFPs appear either sessile or pedunculated and may present superficial erosion/ulceration, sometimes posing problems of differential diagnosis with GISTs. The latter are neoplasms whose incidence is 1% of all gastrointestinal tumors, arising from the Cajal's interstitial cells located in the mesodermal tissue [7]. IFPs even rarely may resemble eosinophilic gastroenteritis, and various benign mesenchymal tumors such as inflammatory pseudotumor, hemangioendothelioma, and hemangiopericytoma. Unlike IFPs of the small bowel, which often present with intussusception or hemorrhage, IFPs of the stomach are usually asymptomatic, although large polyps can cause abdominal pain, early satiety, anemia, and gastric outlet obstruction [3,8,9].

Different hypotheses have been proposed to explain the etiology of these uncommon subtype of gastric polyps, such as the possible role of *H pylori* infection, physical or metabolic factors, and allergic cause, but to date the pathogenesis of IFPs still remains unclear [1,3,6]. In our patient, immunohistochemical detection of *H pylori* in gastric biopsies was negative.

IFPs are usually confined in the submucosa layer but sometimes extend up into the mucosa [10]. On microscopic examinations findings include the presence of perivascular spindle cells proliferation having a typical *onion skinning appearance* and abundant inflammatory infiltration, which consists of lymphocytes, plasmacells, and mostly eosinophils. When in doubt between IFP and GIST, diagnosis can be reached by combining morphology with a limited panel of immunoistochemistry studies; positivity for CD34, and negativity for CD117 and S-100 should establish the correct diagnosis.[1,7,10] In fact CD 117 expression is a specific marker of GISTs, being positive in more than 95% of cases [7].

IFP is considered a benign polyp, and to date there is no evidence of malignant potential for these lesions, although a scarce number IFPs have been described in association with adenocarcinomas in histological specimens of patients undergoing gastrectomy for cancer.[5]

Despite its benign environment, most of the cases of IFPs reported in the literature have been treated by endoscopic or surgical excision [1,3,6].

We proposed to our patient endoscopical removal of his IFP. However, he refused any treatment, as the gastric polypoid lesion was clinically silent. As a consequence, we suggested to the patient an endoscopic surveillance. Until now, after three-year follow-up his gastric IFP showed no growth nor other modifications. Moreover, it should be noted that the IFP observed in our patient was an incidental finding during an upper GI endoscopy, which was required for evaluation of occult anemia. As the patient had never undergone a previous endoscopy, we cannot know for how long the IFP was present in his stomach.

To the best of our knowledge, this is the first report of endoscopic follow-up for an IFP located in the stomach. This case description suggests that removal of gastric IFPs, either by endoscopic or surgical approach, may not be mandatory in asymptomatic patients.

Riassunto

I polipi fibroidi infiammatori, detti anche tumori di Vanek, dal medico che per primo li descrisse nel 1949, sono lesioni dal comportamento benigno che possono svilupparsi lungo i diversi tratti dell'apparato gastro-enterico. Riportiamo il caso di un uomo di 71 sottoposto ad accertamenti endoscopici per sanguinamento digestivo occulto. L'esofagogastroduodenoscopia evidenziò, come reperto occasionale, una lesione polipoide semipeduncolata dell'antro gastrico, risultata essere agli esami istologici e immunoistochimici un tumore di Vanek. Venne pertanto proposta al paziente una resezione endoscopica delle lesione, che il paziente rifiutò in quanto la lesione non era responsabile di alcuna sintomatologia. Venne pertanto eseguito un follow-up endoscopico; dopo tre anni il paziente rimane asintomatico e il tumore di Vanek risulta immodificato

I tumori di Vanek dello stomaco sono quasi sempre asintomatici, a differenza di quelli localizzati nel tenue che spesso esordiscono con sanguinamento o intussuscezione. Dal punto di vista diagnostico pongono problemi di diagnosi differenziale con i GIST e con altri tumori ad origine mesenchimale. Il comportamento biologico dei tumori di Vanek è quello di lesioni benigne, ciononostante i casi riportati in letteratura sono stati trattati con escissione endoscopica o resezione gastrica (open o laparoscopica). Il caso qui riportato suggerisce che i tumori di Vanek dello stomaco in pazienti asintomatici possono anche essere seguiti con il solo follow-up endoscopico.

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