

## Gastric Inflammatory Fibroid Polyp Causing Gastric Outlet Obstruction

Mide Çıkış Obstrüksiyonuna Yol Açan İnflamatuvar Fibroid Polip  
Gastroenteroloji

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### Özet

İnflamatuvar fibroid polipler genellikle midede bulunur, ancak gastrointestinal sistemin her yerinde de bulunabilir. Onların yaygınlığı çoğunlukla altıncı ve yedinci dekadedir. Bizim olgumuzda olduğu gibi, kadınlarda daha sık rastlanmaktadır. Nadiren, inflamatuvar fibroid polipler çocuklarda da bildirilmektedir. İnflamatuvar fibroid polipleri nadiren bulunur, histolojik olarak benign karakterdedirler. Kliniğimize gastrointestinal kanama, bulantı ve erken doyma ile başvuran 71 yaşında bir hasta sunuyoruz. Gastroskopide yaklaşık 3 cm çapında rezeke edilen bir polip saptadık.

**Anahtar kelimeler:** İnflamatuvar fibroid polip, Anemi, Mide çıkış obstrüksiyonu

### Abstract

Inflammatory fibroid polyps are often located in the stomach, but can be found everywhere in the gastrointestinal tract. Their prevalence is mostly in the sixth and seventh decades; unlikely, as in our case, more often women are concerned. Rarely, inflammatory fibroid polyps are reported in children, too (1). Inflammatory fibroid polyps are found rarely, histologically they are of benign character. We present a 71- year-old patient who presented in our department with a gastrointestinal bleeding, nausea and early satiety. In the gastroscopy we found a polyp with a diameter of about 3 cm, which we resected.

**Keywords:** Inflammatory fibroid polyp, Anemia, Gastric outlet obstruction

### Introduction

Inflammatory fibroid polyps are often located in the stomach, but can be found everywhere in the gastrointestinal tract. Their prevalence is mostly in the sixth and seventh decades; unlikely, as in our case, more often women are concerned. Rarely, inflammatory fibroid polyps are reported in children, too <sup>1</sup>. Inflammatory fibroid polyps are found rarely, histologically they are of benign character.

We present a 71- year-old patient who presented to our department with a gastrointestinal bleeding, nausea and early satiety. In the gastroscopy we found a polyp with a diameter of about 3 cm, which we resected.

### Case Report

A 71-year-old patient presented to the gastroenterology department with gastrointestinal bleeding for a couple of days, and also vomiting and early satiety. Laboratory investigation revealed an anemia (Hb 8,1 g/dl, MCV 68 fl, MCH 19,5 pg, Hct 28,4 %). We performed an ultrasound examination of the abdomen and found a thickening in the antral-pyloric region of the stomach. Furthermore, the liver was augmented (diameter 15,6 cm in the medioclavicular line) with a hemangioma of 16 mm in segment 7.

We performed a gastroscopy and found a pedunculated polyp in the prepyloric region with the distal end of the polyp being invaginated through the pylorus into the bulbus duodeni (Figures 1-2).



**Figure 1**  
Invaginated polyp



**Figure 2**  
The polyp is being grasped with a forceps

First, the distal end of the polyp was grasped first with a forceps, then captured with a snare and repositioned in the stomach (Figure 3). After injection of adrenalin (1:10000), diluted with sodium chloride, the polyp was resected in toto with a high-frequency diathermic snare (Figure 4).



**Figure 3**

Repositioning of the polyp and elevating with injection of suprarenin/-sodiumchlorid



**Figure 4**

Repositioning of the polyp and elevating with injection of suprarenin/-sodiumchlorid



**Figure 5**  
The polyp is being resected

As seen in Figure 5, the polyp is resected in two steps. Because of bleeding risk we set 3 hemoclips. The post-procedural surveillance was inconspicuous.

The histological study showed: a polypoid lesion of the distal antrum with a diameter of 3.2 cm x 1.5 cm x 1.0 cm. *Helicobacter pylori* status positive, evidence of chronic inflammation, no dysplasia, immunohistochemistry: CD117 (-), CD34 (-), SMA fokal (+), S-100 (-), Desmin (-), Ki-67 proliferation index: 5 %.

Follow-up gastroscopys will be done 4 weeks, 6 months and 12 months later.

## Case Discussion

Inflammatory fibroid polyps or Vanek polyps are benign mesenchymal tumors<sup>4</sup>, usually firm, solitary, sessile or pedunculated, often ulcerated and arise in the submucosa. First they were described in 1949 by Vanek as gastric submucosal granulomas with eosinophilic infiltration. The incidence is about 0.1 % to 2 % of all gastric polyps.

Inflammatory fibroid polyps can be found everywhere in the gastrointestinal tract, but are most often found in the gastric antrum (70 %) and in the small bowel (20 %),<sup>2</sup>. If not completely resected, there is the risk of recurrence.

As in our case, characteristically these polyps can be found in a prolapsed position of the pedunculated end into the bulbous duodeni. It caused gastric outlet obstruction by obstructing the pylorus completely. It is pulled back with a polyp snare. Patient's complaints ceased after endoscopic polypectomy.

Endoscopically the polyps/tumors resemble gastrointestinal stromal tumors, leiomyomas or gastric cancer<sup>3</sup>. Histologically we can find a proliferation of fibroblasts and inflammatory infiltrate of lymphocytes and eosinophils, and mucosal ulceration<sup>4</sup>. Prominent concentric fibroblastic proliferation ("onion-skin" appearance) is characteristic, which can also be localized perivascularly<sup>6</sup>.

The cells in inflammatory fibroid polyps are negatively stained for s100 protein and desmin, and positively for CD 34<sup>4</sup>, although there are reports about cases with negative CD34<sup>5</sup>.

As in our case, there are reports connecting inflammatory fibroid polyps of the stomach with helicobacter pylori infection<sup>3</sup>.

Clinically, the patients complain about abdominal pains, gastrointestinal bleeding with anemia, nausea and early satiety because of gastric outlet obstruction, as in our case.

Although, there is the hypothesis of a benign origin, it is now known, that the lesions are neoplastic because of activating mutations in the platelet-derived growth factor receptor alpha (PDGFR $\alpha$ )<sup>3</sup>. Biopsies are not useful for the diagnosis until resection<sup>4</sup>. If possible, endoscopical resection should be performed for smaller polyps, but larger tumors have to be resected surgically.

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