

# İnvajinasyonla Pesente Olan İnflamatuar Fibroid Polip: Olgu Sunumu

## Inflammatory Fibroid Polyp Which is Presented with Invagination: Case Report

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### ÖZ

*İnflamatuar fibroid polipler tüm gastrik poliplerin içinde oldukça nadir görülürler. Genellikle submukozadan köken alırlar ve boyutları sıklıkla 1-3 cm' dir. İmmünohistokimyasal boyamada da dendritik hücre kökenli olduğunu düşünülmektedir. Patogenezi bilinmemektedir. Ayırıcı tanıda diğer mezankimal tümörlerle ve gastrointestinal stromal tümörlerle karışabilmektedir. En sık mide antrumundan köken almakla birlikte gastrointestinal sistemin her yerinde görülebilir. Tanı obstrüksiyona bağlı yakınmalarla veya genellikle rastlantısal olarak konulmaktadır. Özellikle ince barsak yerleşimli poliplerin bir komplikasyon gelişmeden tespit edilmesi oldukça zordur. Biz de burada invajinasyona neden olan bir inflammatuar fibroid polip olgusunu sunmayı amaçladık.*

**Anahtar Kelimeler:** inflammatuar fibroid polip, invajinasyon, olgu sunumu

### ABSTRACT

*Inflammatory fibroid polyp is a rare polypoid lesion of the gastrointestinal tract that generally originates from the submucosa. It is 1-3 cm in size. Immunohistochemical staining is also thought to be of dendritic cell origin. Pathogenesis of inflammatory fibroid polyp is unknown. In differential diagnosis may be confused with other mesenchymal tumors and gastrointestinal stromal tumors. Although it originates mostly from the stomach antrum, it can also be found elsewhere throughout the gastrointestinal tract. Diagnosis is complaints related with obstructions or usually detected coincidentally by complaints. Especially, it is difficult to detect in small intestine located polyps without developing a complication. We aimed to present a case of inflammatory fibroid polyp causing invagination. Arnold-Chiari malformation (ACM) is a congenital defect and some of the cases are accompanied by syringomyelia. There are four types of the malformation, type 1 being the most common in adults. Diagnosis of the malformation is usually difficult and therefore delayed. In this case report, we present our experience of anesthesia in a 4-year-old patient with ACM Type 1 with syringomyelia.*

**Keywords:** inflammatory fibroid polyp, invagination, case report

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## INTRODUCTION

Inflammatory fibroid polyp (IFP) is a very rare lesion representing less than 0.1% of all gastric polyps. IFP is mesenchymal tumors that occur in the submucosa and mucosa of the gastrointestinal tract (GIS). Immunohistochemical staining suggests that these polyps are dendritic cell origin. It is considered as reactive and nonneoplastic lesions (1-2).

In diagnosis stage, it can be confused with other mesenchymal tumors, often with gastrointestinal stromal tumors (GIST). It is most commonly originated in gastric antrum, but can be found elsewhere throughout the GIS .It usually arises from the submucosa. (3).

Mostly patients are asymptomatic. Large polyps have been reported to cause abdominal pain, early feeling of satiety, anemia and gastric outlet obstruction. In this article, a 47-year-old male patient who presents acute appendicitis and invagination, who was diagnosed as IFP after ileum resection and appendectomy is presented.

## CASE REPORT

A 47-year-old man with visual impairment and mild mental retardation was admitted to the department of emergency, complaining of nausea, vomiting and abdominal pain. The clinical examination revealed widespread tenderness, defense and rebound in the right lower quadrant. Other system examinations were normal. In laboratory tests, there was no pathology except neutrophil dominance leukocytosis and urea creatinine increase.

The computed tomography scan revealed an appendiceal enlargement in the right lower quadran and ileoileal invagination of distal ileal segment. The patient underwent surgery, who was operated for ileus and appendicitis, invagination was observed in the proximal ileum of the ileocecal valve at approximately 70 cm (Figure 1a-b).

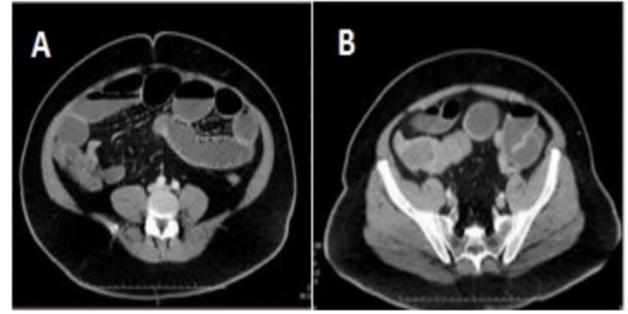


Figure 1(a-b). Radiological image of inflammatory fibroid polyp and invagination

Appendectomy and bowel resection were performed. Histopathological examination of specimen; epithelioid and spindle tumor cells, rich mixed inflammatory cells with stroma and eosinophils containing a prominent capillary network like granulation tissue were detected. Immunohistochemically CD117, S100, CD34, desmin were negative, vimentin and SMA were focally positive, Ki67 index was around 2%. The tumor was finally diagnosed as an IFP based on immunohistochemical findings (Figure 2a-e).

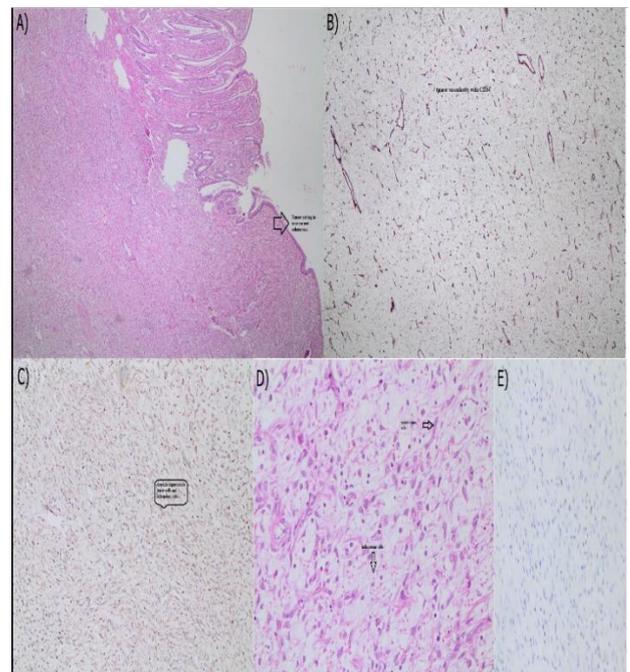


Figure 2a. Submucosal extension

Figure 2b. Negative staining for CD 34

Figure 2c. Focal positive immunoreactivity for Vimentin

Figure 2d. Spindle tumor cells

Figure 2e. Low Ki-67 staining

## DISCUSSION

Inflammatory fibroid polyp is rare lesion of GIS. It is frequently seen in 60-65 years old and is rarely seen in children. Although it is usually localized in the gastric antrum, it is less frequently seen in the small intestine, colon and esophagus as in the case presented. Although familial clustering of IFPs has been reported, its etiology is largely unknown (4).

Patients are usually asymptomatic or they consult doctor with obstructions (pain, bleeding, intussusception, etc.). The methods used in the diagnosis vary according to the localization and size of the lesion in GIS. Diagnosed by endoscopic examinations. However, the safety of endoscopic biopsy is controversial because IFP is generally submucosal and have microscopic heterogeneous morphology. IFPs which located in small intestine can usually be detected during abdominal imaging or after surgery for intestinal obstruction.

Lesions are usually 1-3 cm in size, and can be in sessile or polypoid structure, solitary or multiple structures. but it's also reported that can also grow up to 12 cm (3). In our case, it was admitted to the department of emergency with symptomatic obstruction findings. The mass was 4 cm in diameter and was polypoid in solid and bright cream color.

Microscopically, IFP can be spindle-cell type. These spindle cells show concentric alignment, onion membrane-like, around the vein. Eosinophilic leukocyte infiltration may be present on the ground. Immunohistochemically, vimentin, actin and CD34 are positive. Usually edematous, perivascular concentric fibroblast-free types may have CD34 negative. In our case, although CD34 was negative, morphological findings were consistent with IFP. CD117, S100, CD34, desmin were negative, vimentin positive, and SMA focal positive. The Ki67 index was about 2%.

Differential diagnosis includes, GIST, leiomyoma, schwannoma, fibromatosis, metastatic malignant melanoma, kaposi sarcoma, and eosinophilic gastroenteritis. Unlike malignant lesions, IFP does not have cytological atypia. IFP is separated from; GIST by CD117 and S-100 protein negativity, leiomyoma by CD34 positivity, S-100 protein negativity neurinoma, fibromatosis with CD34 and desmin positivity, metastatic malignant

melanoma with CD117 and HMB45 negativity, kaposi sarcoma with actin-desmin positivity and CD31-CD117 negativity, inflammatory myofibroblastic tumor with CD34 positivity (5).

Although IFPs are generally considered benign, noninvasive lesions, few cases have been observed to invade the muscularis propria layer. With regard to gastric IFPs, two invasive cases was described in 2015 and 2018 (6).

As a result; inflammatory fibroid polyp is a very rare benign lesion. Specifically, it is difficult to detect small intestine located polyps without developing a complication. It may be radiologically and pathologically confused with other occupying benign or malignant lesions. Diagnosis can be made by an experienced pathological and radiological examination.

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