# Inflammatory fibroid polyp of the small bowel causing intestinal obstruction due to intussusception – a case report

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Abstract:

Inflammatory fibroid polyp (IFP) is an uncommon lesion of the gastrointestinal tract. This paper describes the case of 72-year-old woman with IFP. The first manifestation of IFP in this patient was intussuscepion. She underwent emergency surgery, had uneventful post-operative recovery, and was discharged home with asymptomatic digestive tract

Key words: inflammatory fibroid polyp, intussusception

# **INTRODUCTION**

Small bowel tumors are rare. They make only 5% of all digestive tract tumors and 90% of them are benign. Most frequent benign neoplasms of the small bowel are adenomatous polyp, lipoma, leiomyoma and angioma [1, 2]. One of the very uncommon tumours of the small intestine is the inflammatory fibroid polyp. Its histological origin is uncertain and this kind of tumor is qualified as a non-neoplastic lesion [3].

**Case report.** A 72-year-old woman was admitted to the surgery departament with suspicion of *ileus. Anamnesis:* colical abdominal pain increasing during the previous 2 days, with nausea associated with retention of gases. Two days previously, her defecation was normal.

Several years earlier she had been operated on and underwent partial gastrectomy because of gastric ulcer (median superior incision). Four years after the first operation she was operated on again because of gallstones, in the classical way through the same surgical approach.

On arrival at the hospital she was in a quite good general condition, with efficient circulatory and respiratory systems. She complained of a strong abdominal pain, but denied vomiting. Physical examination findings included abdomen flatulence with a diffuse tenderness, without peritoneal symptoms, with a large, non-reducible, multilocular hernia in the post-operative scar. Perystalsis was slow with single loud metalic tones. Laboratory tests were normal, except for elevated leukocytosis and hyponatremy (128,5 mEq/l). A plain radiograph of the abdomen revealed feature of ileus. An abdomen ultrasound revealed no abnormality. After correction of water and electrolyte disorders she underwent emergency surgery. The operation procedure revealed intussusception of the small intestine with a length of about 1 m, on the border of ileum and jejunum (Fig. 1). The fact that the leading edge of the intussusceptum was formed by a small bowel tumour of about 3 cm diameter, without infiltration of the serous membrane, was shown after manual reposition of the intussusception.

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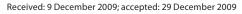




Figure 1 Intussusception of small bowel

Numerous enlarged lymph nodes in the whole mesentery of the small bowel were discovered. No other patological changes were discovered within the abdominal cavity. Resection of the tumour with a part of the jejunum about 20 cm in length and 'end-to-end' anastomosis was performed. The histological specimen and several small bowel mesenterial lymph nodes were sent for pathological examination. After dissection of the lesion, a pedunculated tumor covered by the normal serous membrane was discovered (Fig. 2).



Figure 2 Pendunculated inflammatory fibroid polyp

The patient had an uneventful postoperative recovery, and was fed orally starting from the second post-operative day. She was transferred to the cardiology departament on day 5 because of symptoms of cardiac infarction. The patient was discharged home in good condition, with asymptomatic digestive tract on day 21 after surgical procedure.

The inflammatory fibroid polyp was described in the received pathology conclusion, and reactive inflammation of the small bowel mesenterial lymph nodes revealed.

# **DISCUSSION**

Inflammatory fibroid polyp is a very rare lesion of the digestive tract. Most common localization of this lesion is the stomach [3], but a few cases in the small bowel [4, 6], large bowel [5], duodenum [8], appendix [15] and oesophagus [11] have also been reported. This lesion was described for the first time in 1949 by Vanek and defined then as 'gastric submucosal granuloma with eosinophilic infiltration' [9]. The definition 'inflammatory fibroid polyp' was first suggested in 1953 by Ranier and Helwig, and is still used today.

Macroscopically, this lesion is penduculated or sessile, and covered by normal or inflammatory transformated mucosa. This proliferation lesion probably originated from the submocosa, but its ultimate origin is not precise. Microscopically, it is composed of mononuclear, spindleshaped cells forming a confused or whirl-like structures [12]. The inflammatory infiltration also contains blood vessels, eosinophils, lymphocytes, macrophages and mastocytes [13].

Symptomatology of such lesions is unspecific and is correlated with tumour size and its localization. Such a lesion in the stomach most frequently produces such symptoms as vomiting, abdomenal pain, and nausea. If located in the small or large intestine, it is usually symptomless, or results in subtle ailments like loss of body mass, diarrhea, and anaemia. After reaching a large size, this kind of tumour most often causes occlusive obstruction or intusussception.

Surgical resection of the inflammatory fibroid polyp with a sufficient safety margin is a good way of treatment. There are no references about distant metastases in IFP cases available in medical literature. Only one case report, published in 1984 by Anthony et al., mentions IFP recurrence after a primary surgical resection [14].

### CONCLUSION

Despite the fact that inflammatory fibroid polyp is a very rare lesion, it should be taken into consideration during the diagnostic process in patients with unspecific abdominal disorders.

### **REFERENCES**

- 1. Drews M: Surgery of the small intestine. Essentials of surgery. *Pract Med*, Cracow 2004
- 2. Bartnik W: Small intestine diseases. Internal diseases. Choroby jelita cienkiego. Choroby wewnętrzne. Pract Med, Cracow 2005
- 3. Johnstone JM, Morson BC: Inflammatory fibroid polyp of the gastrointestinal tract. Histopathology 1978, 2, 349-361.
- 4. Shih LN, Chang SL, Chuang SM, Kuo CF: Inflammatory fibroid polyp of the jejenum causing intussusception. Am J Gastroenterol 1997, 92, 162-164
- 5. De La Plaza R, Picarda AL, Cuberes R, Jara A, Martínez-Peñalver I, Villanueva MC, Medina M, Alías D, Osorio S, Pacheco E, Suárez A: Inflammatory fibroid polyps of the large intestine. Dig Dis Sci 1999, 44, 1810-1816
- 6. Dawson PM, Shousha S, Burn JI: Inflammatory fibroid polyp of the small intestine presenting as intussusception. Br J Clin Pract 1990, 44, 495-497.
- 7. Rubinstein R, Mogle P, Merguerian P, Rosenmann E: Inflammatory fibroid polyp of the small intestine: report of two cases and review of the literature. Israel J Med Scien 1983, 19, 828-33.
- 8. Ott DJ, Wu WC, Shiflett DW, Pennell TC: Inflammatory fibroid polyp of the duodenum. Am J Gastroenterol 1980, 73, 62-64
- 9. Vanek J: Gastric submucosal granuloma with eosinophilic infiltration. Am J Pathol 1949, 25, 397-411.
- 10. Helwig EB, Ranier A: Inflammatory fibroid polyps of the stomach. Surg Gynecol Obstet 1953, 96, 355-367.
- 11. Godey SK, Diggory RT: Inflammatory fibroid polyp of the oesophagus. World J Surg Oncology 2005, 3, 3.
- 12. Galbfach PJ, Narbutt PG, Mik MŁ, Trzciński R, Dziki AJ: Inflammatory fibroid polyp of the stomach - a case report. Pol Merkur Lek 2009, 26,125-
- 13. Gönül II, Erdem O, Ataoğlu O: Inflammatory fibroid polyp of the ileum causing intussusception: a case report. Turk J Gastroenterol 2004, 15, 59-62
- 14. Anthony PP, Morris DS, Vowles KD: Multiple and recurrent inflammatory fibroid polyps in three generations of a Devon family: a new syndrome. Gut 1984, 25, 854-862.
- 15. Chatelain D, Brevet M, Fuks D, Yzet T, Verhaeghe P, Regimbeau JM, Lauwers G, Sevestre H: Inflammatory fibroid polyp, a rare tumor of the appendix. Gastroenterol Clin Biol 2008, 32, 274-277.