

# Gastric Inflammatory Fibroid Polyp Causing Gastric Outlet Obstruction: Case Report and Review of Literature

H Ali, M Rasheed, H M, J Saad

## Citation

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## Abstract

Inflammatory fibroid polyps are rare gastrointestinal lesions. We report a case of gastric inflammatory fibroid polyp presenting as gastric outlet obstruction, successfully treated with gastric resection.

## INTRODUCTION

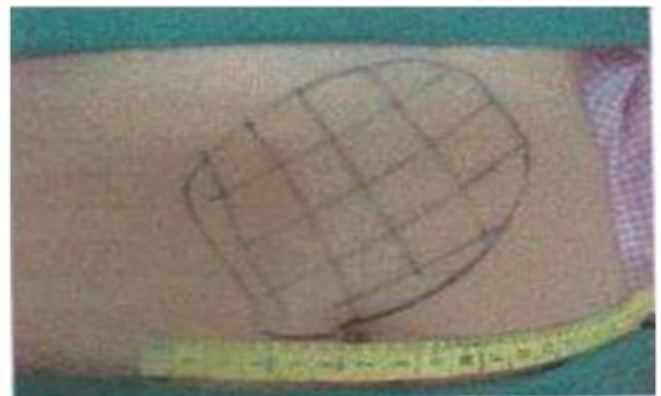
Inflammatory fibroid polyp, IFP, is a rare lesion of the gastrointestinal tract, GIT, that can be found anywhere but mostly in the stomach. It arises from the submucosa, grows to variable sizes and has different presentations according to size and location.

## CASE REPORT

A 29-year-old female teacher presented with 6 months history of epigastric pain, postprandial non-bilious vomiting, and progressive weight loss. Physical examination revealed a body weight of 39kg, anemia and a mobile, firm, upper abdominal mass of approximately 10x12cm (Fig. 1). The rest of the examination was unremarkable. Routine hematological and biochemical tests revealed iron deficiency anemia. Abdominal ultrasonography and double-contrast computerized tomography scanning showed a broad-based mass originating from the submucosa of the posterior wall of the body of the stomach, occupying almost the whole gastric lumen and protruding into the pylorus (Fig. 2a and 2b). Gastroscopy showed a 7cm sessile gastric polyp with superficial necrosis and ulceration (Fig. 3). Endoscopic biopsies showed non-specific gastritis. The patient underwent laparotomy and Billroth II gastrectomy (Fig. 4-7). On microscopy the polyp was arising from the submucosa and showed intense fibroplastic and vascular proliferation along with inflammatory infiltrate consisting of eosinophils, neutrophils, lymphocytes and occasional plasma cells. Few *H. pylori* were seen in gastric pits. On follow-up later, the patient gained weight and was free of symptoms and endoscopic recurrence.

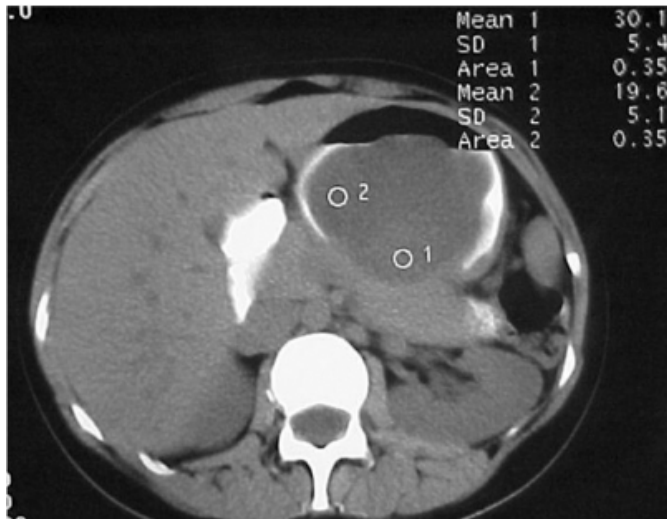
**Figure 1**

Appearance of the lump



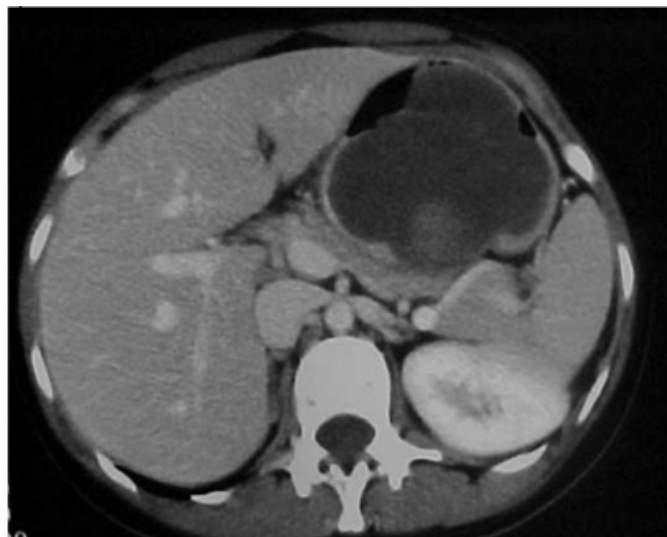
**Figure 2a**

Computed tomography of the abdomen after oral contrast opacification (a) and after contrast medium injection (b) demonstrated an intragastric lobulated heterogeneous mass predominantly hypodense (densities about 20 HU) with mild contrast uptake at its base of insertion.



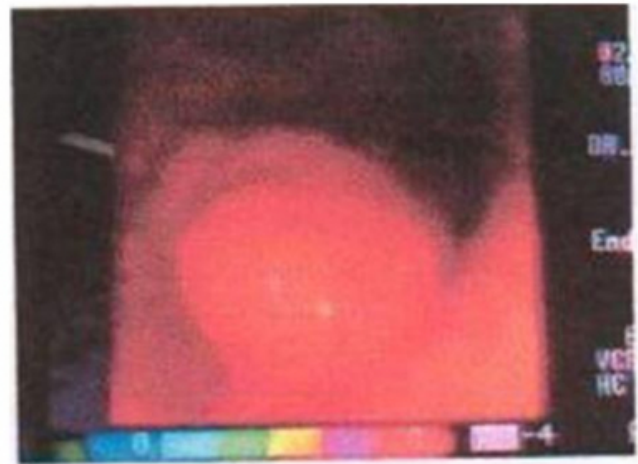
**Figure 2b**

Computed tomography of the abdomen after oral contrast opacification (a) and after contrast medium injection (b) demonstrated an intragastric lobulated heterogeneous mass predominantly hypodense (densities about 20 HU) with mild contrast uptake at its base of insertion.



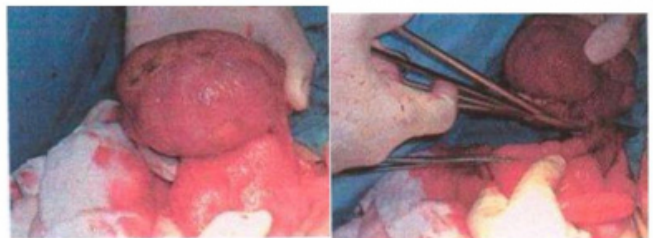
**Figure 3**

Endoscopic appearance



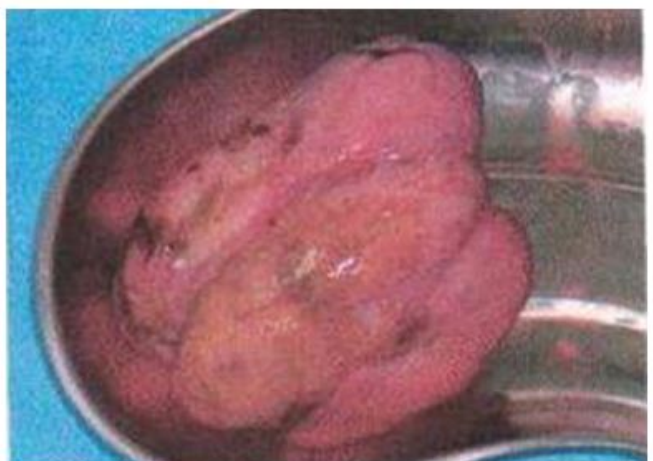
**Figures 4a and 4b**

At laparotomy



**Figure 5**

Polyp after resection



**Figure 6**

Partial gastrectomy



**Figure 7**

Gastrojejunostomy



## DISCUSSION

IFP, first described by Vaneck in 1949, is usually a solitary, pedunculated or sessile lesion with inflammatory basis that can be found anywhere along the GIT, although 80% are of gastric origin(1).

They arise from the submucosa and are histologically

characterized by whorls of fibrous tissue and blood vessels and eosinophil-rich inflammatory exsudates(2). Synonyms for the same lesion include eosinophilic granuloma, hemangiopericytoma, polypoid fibroma and inflammatory pseudotumor(3). Although the etiology of IFPs remains obscure, the presence of eosinophils suggests an allergic basis. An infective etiology was never reported, although several reported cases showed its association with *H. pylori* infection(4,5). However, it has been generally accepted that IFPs are non-neoplastic and have no malignant potentials. The association with Crohn's disease has also been reported(6). Clinical manifestations are variable, depending on the size and location of the lesion. Most of them are small and asymptomatic; nevertheless, they can cause periodic abdominal pain, vomiting and anemia due to ulceration and bleeding. In the stomach, large IFPs occasionally prolapse through the pylorus causing gastric obstruction, as in our case, whereas in the small bowel intussusception is the usual presentation. Most patients are in their sixth decade, although no age is immune and cases have been reported even in children(7). There is slight female preponderance with a female-to-male ratio of 1.6:1. IFPs are usually less than 3cm in size, but polyps as large as 19cm have been reported. Imaging studies such as ultrasonography, barium studies and computerized tomography can help diagnosing the condition, although there are no distinctive radiological features for IFPs and a preoperative correct diagnosis was made in only 32% of cases in one series(8). The final diagnosis depends on histological examination. In this context, it is worth mentioning that endoscopic tiny biopsies do not incorporate deeper layers, where the polyp originates, and are therefore not informative(9). Small lesions are best removed by endoscopic snaring, while those greater than 3cm require various gastric resections depending on location within the stomach. Once resected, gastric IFPs do not recur, nor do new ones develop in the gastric remnant(10).

## References

1. Salvin G: Tumor & Tumor-Like Conditions. In: Booth C, Neale G, eds. Disorders of the Small Intestine. Oxford, England: Blackwell Scientific, 1985: 371-372.
2. Murphy S, Shaw K, Blanchard H: Report of three gastric tumors in children. *J Pediatr Surg*; 1994; 29: 1202-1204.
3. Johnstone JM, Moroson BC: Inflammatory fibroid polyp of the gastrointestinal tract. *Histopathology*; 1978; 2: 349-361.
4. Shalom A, Wasserman I, Segal M, Orda R: Inflammatory fibroid polyp and *Helicobacter pylori*. Aetiology or coincidence? *Eur J Surg*; 2000; 166: 54-57.
5. Chongsrisawat V, Yimyeam P, Wisedopas N, Viravaidya D, Poovorawanl Y: Unusual manifestations of gastric inflammatory fibroid polyp in a child. *World J*

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Gastroenterol; 2004; 10: 460-462.

6. Korman U, Kuruoglu S, Haider S: Rare complication of intestinal Crohn's disease: Giant fibroid polyp. Eur Radiol; 2000; 10: 435-437.

7. Stolte M, Sticht T, Eidt S, Ebert D, Finkenzeller G: Frequency, location and age and sex distribution of various types of gastric polyps. Endoscopy; 1994; 26: 659-665.

8. Azar T, Berger DL: Adult intussusception. Ann Surg;

1997; 226: 134-138.

9. Matsushita M, Hajiro K, Okazaki K, Takakuwa H: Endoscopic features of gastric inflammatory fibroid polyps. Am J Gastroenterol; 1966; 91: 1595-1598.

10. Anthony PP, Moris DS, Vowles KDJ: Multiple and recurrent inflammatory fibroid polyps in three generations of a Devon family: A new syndrome. Gut; 1984; 25: 854-862.

**Author Information**

**Hussein Ali, MD**

General Surgery Department, Nejran Armed Forces Hospital  
Egypt  
elsherefhussien@yahoo.com

**Mohammed Rasheed, MD**

General Surgery Department, Nejran Armed Forces Hospital  
Sudan

**Hafeez M, FSCP**

Pakistan

**Jamel Saad, MD**

Radiology Department, Nejran Armed Forces Hospital