

Incidental Finding of Inflammatory Fibroid Polyp (IFP) in Transverse Colon during Colon Cancer Screening via Colonoscopy - A Rare Case Report

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Abstract: *The Objective is to report a rare case of 51-yrs old female who presents with us for a routine colon cancer screening with the standard method i-e colonoscopy. She is completely asymptomatic and the physical examination also turned to be non-significant. Of interest, her colonoscopy showed a pedunculated mass attached with the walls of proximal Transverse colon. The mass was removed and sent for the histopathology which manifests benign inflammatory changes with fibroblastic elements so the term used for mass was Inflammatory Fibroid Polyp (IFP). IFPs are common mainly in patients over 50 yrs of age and found mainly in ascending or descending parts of large bowel. Our patient is of utmost interest since only 32 cases of IFPs located in transverse colon have been reported to date.*

Keywords: Inflammatory Fibroid Polyp (IFP), Transverse Colon, Colon cancer screening, Colonoscopy, Incidental finding of IFPs

1. Introduction

Inflammatory Fibroid Polyps (IFPs) are rare, reactive non-neoplastic lesions that can occur in stomach, small intestine, and colon. They have no documented malignant potential. We are aware of only 32 cases reported in literature (1, 2). IFP'S are generally asymptomatic, but they might cause symptoms like gastrointestinal bleeding, bowel obstruction, abdominal pain and intussusception depending upon their size and location. In our case the patient was completely asymptomatic. The diagnosis is usually made by imaging studies or endoscopy. Treatment options include surgical excision in most cases, and endoscopic resection of these polyps (3, 4).

In this case, we report the presence of inflammatory fibroid polyps in the transverse colon with colonoscopy of a completely asymptomatic patient and their successful endoscopic removal with hot forceps biopsy.

2. Case History

A 51-year old woman presented to the office for routine colon cancer screening. The physical exam was unremarkable, no tenderness or palpable masses felt on the abdominal exam.

Colonoscopy was performed and a gray sessile polypoidal mass measuring 2 cm × 3 cm in the proximal transverse colon was found (Fig.1). It was removed piecemeal with hot biopsy forceps. The microscopic picture of the polyp showed thickened blood vessels wall, capillaries, fibroblasts and many inflammatory cells particularly eosinophils. Immunostains were performed and they appeared to be negative for tumor markers like S 100 and Desmin. These features strongly suggest inflammatory fibroid polyps (IFPs).

Case No.	Age, y	Sex	Location	Gross Description	Treatment	Ref	Year
1	79	M	Cecum	Less than 1 cm	None	4	1952
2	37	M	Cecum	6.5 cm, pedunculated	Surgery	16	1955
3	67	M	Cecum	3.5 cm, pedunculated	Surgery	17	1960
4	4	M	Transverse	3.5 cm, pedunculated	Surgery	18	1966
5	56	M	Cecum	7 cm	Surgery	19	1977
6	69	M	Transverse	5 cm, pedunculated	Surgery	20	1979
7	51	M	Sigmoid	3 cm, pedunculated, ulcer	Surgery	9	1979
8	24	M	Transverse	5 cm	Surgery	21	1983
9	8	M	Rectum	3 cm sessile	Surgery	22	1984
10-14	NS	NS	4 Cecum 1 Ascending	1.5-4 cm	1 Cecum endoscopic; 1 Ascending and 3 cecum surgery	23	1984
15	71	M	Cecum	4 cm, pedunculated	Endoscopic	24	1985
16	42	M	Cecum	3.5 cm	Surgery	25	1992
17-20	24-72	3 M, 1 F	3 Transverse 1 Cecum	3.6-5 cm 2 pedunculated, 2 sessile	NS	26	1992
21	33	F	Descending	4 cm, pedunculated	Surgery	27	1995
22	63	M	Ascending	3.5 cm, sessile, ulcer	Surgery	28	1999
23	45	F	Cecum	0.5 cm, sessile, erosive	Endoscopic	29	2000
24	66	M	Cecum	3.5 cm, sessile	Surgery	30	2004
25	40	M	Ascending	3 cm, pedunculated	Endoscopic	2	2005
26	45	M	Transverse	1.8 cm, depressed	Surgery	31	2006
27	82	M	Transverse	0.6 cm, pedunculated	None	32	2007
28	28	M	Sigmoid	4 cm, pedunculated	Endoscopic	33	2007
29	23	F	Descending	4.5 cm, pedunculated, erosive	Endoscopic	10	2008
30	66	F	Cecum	3 cm, sessile, ulcer	Endoscopic	34	2008
31	63	F	Cecum	4 cm, pedunculated	Surgery	35	2008
32	83	M	Descending	7 cm, pedunculated	Endoscopy	*	2011

*The case described in this article; NS-not specified.

Figure 1: Colonoscopy Showed A 2CM. X 3CM Polyp in the Transverse Colon



Figure 2: POLYP IN LP

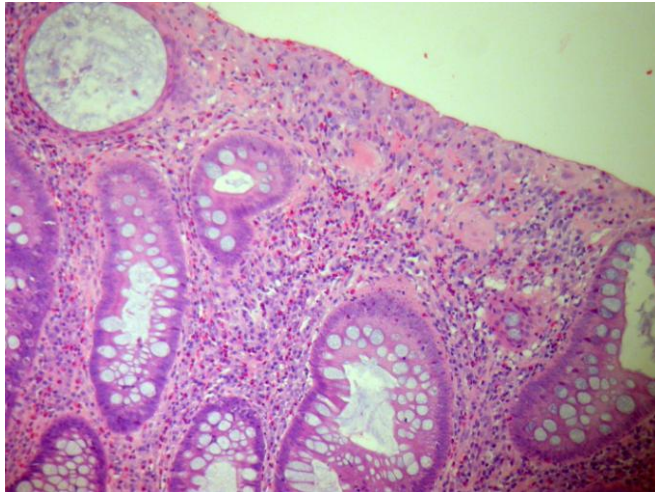
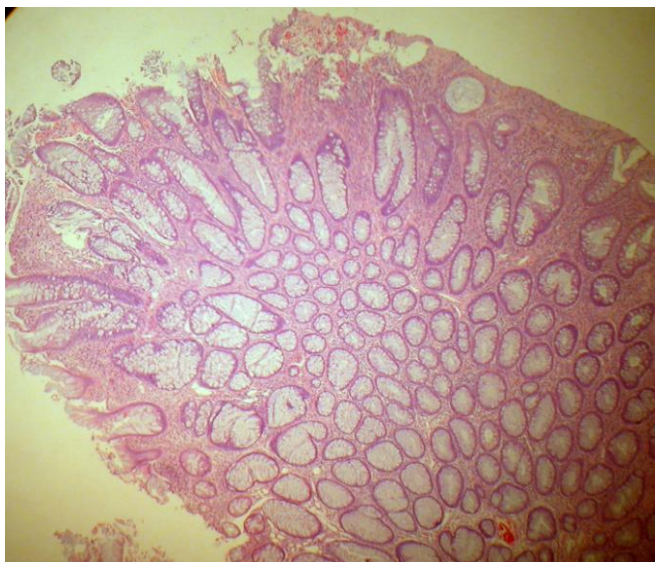


Figure 3: On Histopathology The Microscopic Picture Of The Polyp Shows Thickened Blood Vessels Wall, Capillaries, Fibroblasts And Many Inflammatory Cells Particularly Eosinophils. Immunostains Were Performed And They Were Negative For S- 100 And Desmin.



3. Discussion

Inflammatory fibroid polyps are rare sub-mucosal lesions of the gastrointestinal tract that usually appear as sessile or pedunculated polyps and usually show benign course (2, 3). They can occur anywhere in the GI tract, but most common site is stomach, followed by the small intestine and the colon. IFP'S are usually asymptomatic but they may cause abdominal pain (54%), bloody stools (33%), weight loss (21%), diarrhea, anemia (17%) and rarely intussusception (5). These symptoms depend on their location in the gastrointestinal tract. Their cause remains unknown. An allergic reaction to a stimulus has been proposed, or a reactive lesion of fibroblastic or myofibroblastic nature.

Histologically, IFP's are composed of benign appearing spindle cells in the lamina propria leading to a wide separation and disorganization of the colonic crypts and usually contains blood vessels, fibroblasts, and an edematous stroma rich in eosinophils. These polyps are usually negative for tumor markers like Desmin, Vimentin, muscle specific actin, CD34, CD117, CD68, P53, c-kit, Bcl-2 and S-100

protein which helps to differentiate IFP from gastrointestinal stromal tumor (GIST) (6). Familial relationship has been described. Definite diagnosis is by endoscopy and biopsy. Treatment is by endoscopic resection or surgery. Recent studies have shown that treatment for asymptomatic inflammatory fibroid polyps is not mandatory (7).

In conclusion, we have reported a case of inflammatory fibroid polyp in the transverse colon, diagnosed on regular colonoscopic screening in a completely asymptomatic patient. Fibroid polyp was removed endoscopically, and its histological examination shows no malignant potential. Endoscopic polypectomy is the most important tool for the diagnosis and treatment of inflammatory fibroid polyps.

References

- [1] Hsin-Pao Chen, Kuang-Wen Liu, Ching-Tai Lee, Jau-Chung Hwang, E-Da Med J 2010; 1, Inflammatory Fibroid Polyp of Colon Presented with Colonic Intussusception.
- [2] B. Coulier, Ph. Maldague, B. Broze, I. Gielen. ILEAL INFLAMMATORY FIBROID POLYP CAUSING ILEOCOLIC INTUSSUSCEPTION, JBR-BTR, 2008, 91: 149-152.
- [3] Oscar Lifschitz M.D., Silvia Lew M.D., MishaWitz M.D., Raphael Reiss M.D., Benjamin Griffel M.D. Inflammatory fibroid polyp of sigmoid colon .November-December, 1979, Volume 22, Issue 8, pp 575-577
- [4] Inflammatory fibroid polyp occurring in the transverse colon diagnosed by endoscopic biopsy. Shoji Hirasaki, Minoru Matsubara, Fusao Ikeda, Hideaki Taniguchi, Seiyuu Suzuki.
- [5] JelaBandovic, M.D, 25 May 2012, last major update May 2012 ,PathologyOutlines .
- [6] ACG case reports Journal: Ammar Kayyali, MD1, AnisToumeh, MD1, Usman Ahmad, MD1, Luis E. De Las Casas, MD, and Ali Nawras, MD, FACG. Giant IFP of the descending colon treated with endoscopic resection.
- [7] Rizzo G, Fancellu A, Porcu A. Inflammatory fibroid polyp (Vanek's tumor) of the gastric antrum: is treatment always mandatory?