

What is the Clinical Relevance of Filiform Polyposis?

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Filiform polyposis (FP) of the colon is an uncommon entity referred to as inflammatory polyposis, or pseudopolyposis.^{1,2} The term FP was first coined by Appelman *et al.*³ who used it to describe a syndrome involving the radiographic appearance of numerous long slender worm-like or filiform defects in the colon.

The pathogenesis of FP is uncertain. However, FP was generally thought to be associated with the post-inflammatory reparative process.^{3,4} The vast majority of cases occur in the setting of inflammatory bowel disease (IBD), particularly in patients with ulcerative colitis. Crohn's disease can be presented as giant inflammatory polyposis appearing mass lesion.⁵

Although FP typically occurs in patients with IBD, it is important to realize that some cases have been documented in patients without IBD. FP can be sequelae of past bacillary dysentery, necrotizing enterocolitis, enema-induced colitis, uretero-sigmoidostomy, stercoral ulcer, Langerhans cell histiocytosis X, and colonic tuberculosis.⁶⁻¹⁴ A case of FP associated with perforated diverticulitis of the sigmoid colon in a patient without IBD was reported with the pathogenesis possibly related to a localized response to cytokines and growth factors generated by the inflamed diverticular mucosa.¹⁵ These polyps represent the post-inflammatory reparative process as do those in IBD.

Some authors suggest the possibility that the pathogenesis of filiform polyps may not be related to a post-inflammatory reparative process but rather a hamartomatous process because neuromuscular and fibrovascular hyperplasia/disarray were observed in their case series.¹⁶

FP usually has a thin, straight shape resembling the stalks of polyps without the heads.¹⁶ The polyps often present as multiple mucosal projections that can reach up to 9 cm in length and can have bridging between adjacent polyps (Fig. 1).^{3,17,18} The most common sites affected are the sigmoid colon and rectum. A complete colonoscopy is important, because polyposis can extend as far as the cecum.^{15-17,19} The polyps can be localized, or

they can diffusely involve the colon. Diffuse colonic FP can endoscopically mimic familial adenomatous polyposis.¹⁶ Furthermore, numerous conglomerated polyps may give the appearance of a fungating mass which has been confused with cancer on colonoscopy and radiology studies.⁵ In some cases, the polyps are difficult to distinguish from villous adenomas, necessitating a biopsy or polypectomy to confirm an exact diagnosis.^{17,20}

The pathologic findings of FP usually support inflammatory polyp. Microscopically, FP ranges from normal to that containing nonspecific acute or chronic inflammation, but hyperplastic polyps as well as dysplasia or adenoma can also be contained among numerous polyps.^{5,6,15,16,19,21}

FP can be developed in two different clinical settings: 1) acute colitis, when islands of residual mucosa may remain after patchy mucosal sloughing;⁶ and 2) chronic colitis, when polyps composed of mucosal elements and granulation tissue may form by the reparative sequelae of inflammation.^{6,11,22} Since polyps that form in these two settings (acute or chronic) are thought to be indistinguishable by histopathologic examination, it has been proposed that they be categorized as a single entity, "FP or inflammatory (pseudo) polyps."²³

FP is mostly asymptomatic and incidentally diagnosed on colonofiberscopy. However, patients may present with a variety of symptoms, including anemia, weight loss, cramping abdominal pain, and diarrhea.^{5,19} It can also produce obstruction and intussusceptions in addition to bleeding.^{24,25} Ulceration of polyps and subsequent hemorrhage appears to be the result of trauma caused by fecal flow and peristalsis.^{1,26,27} Rare cases presenting as toxic megacolon have been reported.²⁸

To date, FP themselves are not considered precancerous and not an indication to operate.^{3,15,17,19,21,26,27} Many unnecessary colectomies have been performed for inflammatory polyps.²² It is important to remember that sessile inflammatory polyps can sometimes mimic invasive colorectal cancers of a polypoid type and tight collections of filiform polyps or "giant inflammatory

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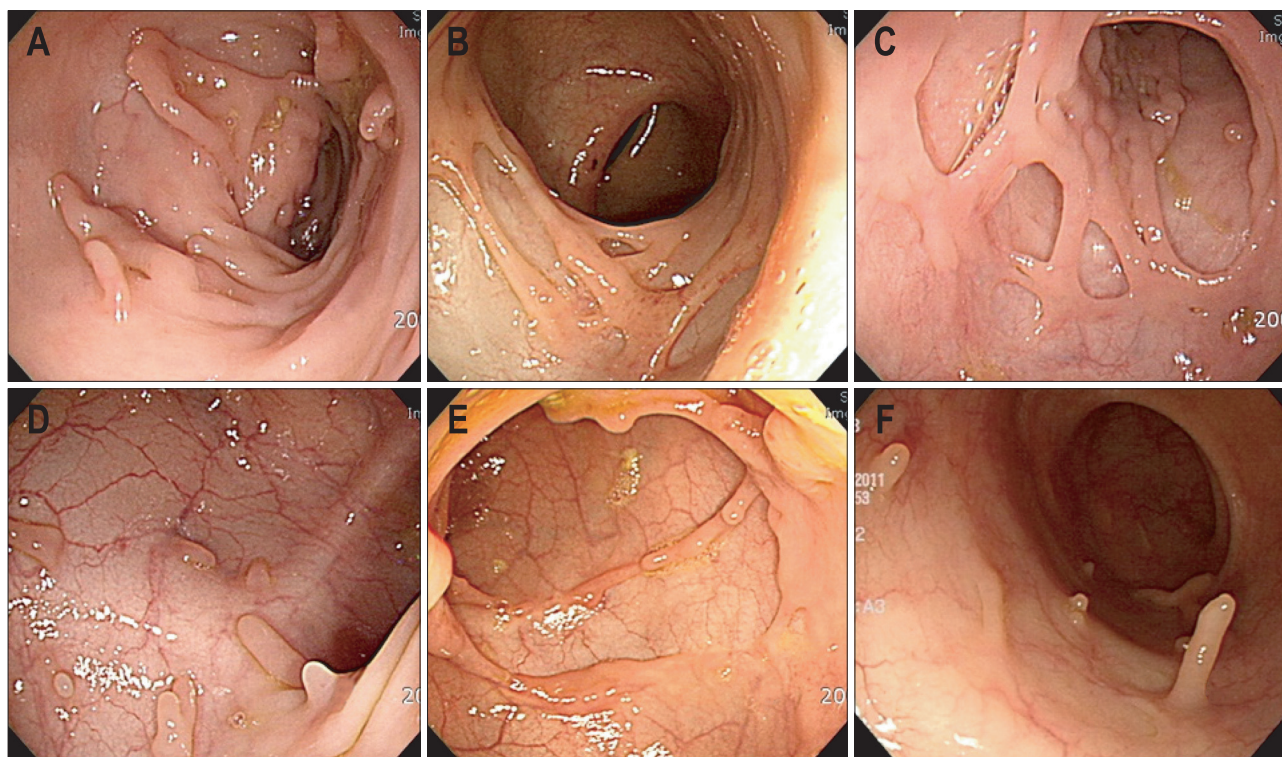


Fig. 1. (A-F) Colonoscopic finding of filiform polyposis. Multiple worm-like or finger-like polypoid lesions with a stalactite appearance were noted on the left side of the colon, especially in the sigmoid area.

polyps" can mimic adenomatous polyps and even malignancies.^{20,29} It is necessary to determine whether polyps are inflammatory or adenomatous because adenomatous polyps have malignant potential. If other pathology are suspected based upon their endoscopic appearance, polypectomy, or biopsy is necessary to evaluate the histology and make a diagnosis.⁶ The treatment of biopsy-proven inflammatory polyps may remain conservative as long as these lesions are asymptomatic. If the polyp is pedunculated, easily accessible, and can be removed with minimal risk of hemorrhage, then it may be removed through the colonoscope using the snare and cautery technique.

Partial colectomies should be reserved for complicated cases of symptomatic inflammatory polyps or when malignancy cannot be excluded.²¹ For example, if it is thought that FP has developed in association with active IBD, preemptive surgical resection would seem reasonable, particularly given the increased risk of colon cancer with ulcerative colitis and Crohn's disease. However, in asymptomatic patients without a history who are found to have FP, observation is the best option.¹⁶ When patients with inflammatory polyposis require surgical management, it is important to evaluate the margins of resection, because inflammatory polyposis can recur in the presence of acute inflammation or residual disease at the resected margins.⁵

With FP, it is difficult to say for certain the actual rate of malignant transformations. Although long-term monitoring for concurrent or subsequent development of adenomatous polyps in a colon afflicted by FP has not been reported, FP has been

known to have a benign clinical course rather than malignant transformation.^{3,15,17,19,21,26,27} Serial colonoscopies, however, must be performed in FP cases.

CONFLICTS OF INTEREST

No potential conflict of interest relevant to this article was reported.

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