Interdisciplinary Management of Perianal Crohn's Disease

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KEYWORDS

- Perianal fistulizing disease • Crohn's disease
- Combined medical and surgical management

KEY POINTS

- Perianal Crohn's disease (CD) is notoriously difficult to treat and often requires a multidisciplinary team of gastroenterologists, surgeons, and radiologist to best determine the management of the patient.
- Medical options for perianal CD most commonly include antibiotic therapy and biologic therapy.
- The primary surgical treatment is drainage of sepsis and placement of a seton for ongoing drainage.
- Many other surgical options, such as fistulotomy or advancement flaps, are not feasible if there is evidence of impaired wound healing or the presence of proctitis.
- Emerging stem cell–based therapies are promising, with safety and efficacy shown in several clinical trials.

INTRODUCTION

Perianal fistula is one of the most common manifestations of Crohn's disease (CD). At least 26% of patients with CD develop perianal fistulas in the first 2 decades following diagnosis,[1–4] particularly those with colonic and rectal involvement.[1] Achieving complete fistula healing is commonly an arduous process involving multiple medical and surgical treatments followed by multiple relapses. The resulting morbidity greatly affects patients' quality of life because of pain, discharge, and abscess formation, and often results in difficulty maintaining a job.

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In approximately 10% of patients, a perianal fistula is the initial manifestation of CD.[1] The formation of a perianal fistula may precede the onset of intestinal CD by several years.[1,5] Of note, the presence of a fistula is an indicator of more aggressive disease that may require more frequent hospitalizations, higher incidence of surgery, and increased use of steroid treatment.[6] Perianal fistulas are notoriously difficult to treat. Given the significant morbidity associated with perianal fistulas, the diagnosis, assessment, and treatment of perianal fistulas mandates a multidisciplinary approach involving gastroenterologists, surgeons, and radiologists at a specialized referral center.

DIAGNOSIS

Diagnosis is most often initiated by the presence of drainage on physical examination, air or stool in the urine in the setting of fistulization to the bladder, or new onset of high-output liquid stool in the setting of an internal fistula. Following a careful history and physical examination, imaging is of paramount importance in diagnosis and classification of fistulas. Of the currently used methods for mapping fistula anatomy, examination under anesthesia (EUA), MRI of the pelvis, and endoanal ultrasonography (EUS) all show similar accuracies.[7–10] Although the gold standard for diagnosis remains undefined, when combining EUA and MRI, diagnostic accuracy approaches 100%.[10] In addition, an international consensus report has recommended the use of MRI (**Figs. 1** and **2**)[11,12] and clinical examination to assess fistula closure in clinical trials.[13]

Treatment Goals and Classification of Healing

The primary goal for the patient is to reduce or eliminate fistula secretion and abscess risk. In addition, avoidance of a stoma and fecal incontinence are critical to consider when treating a fistula.

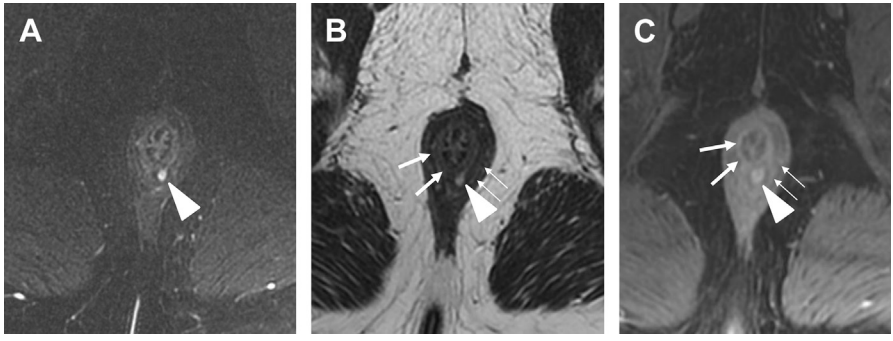

Fig. 1. Simple intersphincteric perianal fistula showing typical imaging characteristics. Axial T2-weighted fast spin-echo image with fat saturation (*A*) shows a hyperintense fistula (*A*, *arrowhead*). T2-weighted fast spin-echo image with fat saturation shows that the fistula (*B*, *arrowhead*) is located between the internal (*B*, *larger arrows*) and external anal sphincter (*B*, *small arrows*). After gadolinium enhancement, the internal anal sphincter (*C*, *large arrows*) enhances to a greater degree than the external anal sphincter (*C*, *small arrows*), which enhances similar to skeletal muscle. The intersphincteric fistula enhances avidly because of internal granulation tissue (*C*, *arrowhead*). Multiplanar T2-weighted fast spin-echo images without fat saturation permit classification of the fistula as an intersphincteric fistula that arises below the level of the puborectalis, and has an external opening along the left gluteal cleft.