Treatment of Perianal Fistulizing Crohn Disease: New Recommendations

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A Team Approach

Perianal Crohn disease is particularly distressing to patients and frustrating for physicians to effectively treat. Fistulae are a common complication of Crohn disease. Medical treatment with antibiotics and immunomodulators has had limited efficacy, but treatment with biologics has redefined best medical options for these patients. Surgery has a high rate of recurrence for most patients, with the ever-present risks for stomas, incontinence, and poor wound healing; a significant concern is that of the need for repeated surgeries.

Clearly, the approach to these patients should be multidisciplinary, combining gastroenterologists, colorectal surgeons, and advanced imaging radiologists with specific expertise in this area. From this consensus document, some of the most relevant evidence-based recommendations for best practice are highlighted.

Study Summary

Classification and Diagnosis

MRI. The fistula activity should be established by clinical examination and MRI, which is the current gold standard. The accuracy of fistulography and CT is poor for the diagnosis and classification of these fistulae. These methods are considered outdated and pose significant radiation risk to patients who likely have had considerable previous radiation exposure.

The course of the fistula in relation to the anal sphincter and levator plate is important. The length of perianal fistulae has been shown to be a predictor of response. MRI is particularly helpful in visualizing the anal sphincter and pelvic floor muscle, as well as in detecting fistulous tracts and any associated abscesses. The T2-weighted sequence with fat suppression is optimal for imaging of the fistula, whereas the T1-weighted sequence is useful for distinguishing between fluid/pus and granulated tissue.

Examination under anesthesia. This is important to help further define the diagnosis and classification, and to provide therapeutic intervention with abscess drainage or seton placement.

Endoscopic ultrasonography. Ultrasonographymay be useful for a detailed assessment of the anal sphincter, but accuracy in the identification of ischioanal fossa or supralevator abscesses can be limited owing to restricted views. Local infusion of hydrogen peroxide may improve visualization. Transperineal ultrasonography may be better than MRI for detection of anovulvar fistulae.

Multidisciplinary Treatment

Goals of treatment. The short-term goals of treatment are drainage of any abscesses and relief of symptoms. Long-term goals are resolution of drainage, fistula closure, improved quality of life, and avoidance of protocolectomy and permanent ostomy.

Drug treatment. There are no roles for aminosalicylates or steroids in the management of Crohn disease. Antibiotics (metronidazole and ciprofloxacin) may improve symptoms. Overall, these agents may reduce fistula drainage but not effect healing. Thiopurines (azathioprine, 6-mercaptopurine) have not been consistently shown to improve or close fistulae. There are no data on the effectiveness of methotrexate in these patients.

Limited data suggest some effectiveness with the use of oral tacrolimus, although not for complete closure of the fistulae. However, this is an option when attempting to avoid a surgical stoma. Observational studies on the use of cyclosporine report efficacy but high relapse rates after discontinuation. Adverse events limited further use in most patients.

Use of anti-tumor necrosis factor (TNF) agents combined with thiopurines is superior to monotherapy with anti-TNF agents. Data from 2 randomized controlled trials of infliximab demonstrated induction of closure and maintenance compared with placebo for up to 54 weeks. Although there has not been a specific trial dedicated to the efficacy of either adalimumab or certolizumab for primary endpoint effectiveness in treating fistulizing disease, benefit has been suggested for both from subgroup analyses of other studies.

Surgery. Surgical drainage of perianal abscesses is recommended before initiating medical therapies. This minimizes the risk for septic complications with immunosuppressant or biologic treatments.

When appropriate, placement of noncutting setons is useful to prevent recurrent abscess formation. Loose setons are preferred because they preserve the integrity of the external anal sphincter. As a general recommendation, these setons should be kept in place until induction of the anti-TNF treatment is completed.

Fistulotomy is a treatment for superficial symptomatic fistula. Fistulotomy is rarely used in low intersphincteric fistulae, and if it is, it must be performed carefully with the intent of preservation of continence – a particular concern in women with anterior disease. Fistulotomy for suprasphincteric or extrasphincteric fistulae is associated with poor healing and increased rates of incontinence.

Other definitive nonresection surgical repairs include a mucosal advancement flap, which involves mobilization of the rectal mucosal flap to cover the primary end of the fistula so as to allow the remaining fistula to dry out. Although success rates have been approximately 64%, one half of patients require reoperation and 10% develop incontinence.

A temporary diverting stoma is an option for severe, refractory complicated disease.

Proctocolectomy with permanent ostomy is the treatment of last resort for refractory disease. This should be reserved for patients with uncontrollable sepsis and tissue destruction or for those who are refractory to other options.

Viewpoint

Effective management of Crohn disease perianal fistulae is challenging. The primary principles are to drain infected collections; use setons as required; aggressively manage proctitis; appropriately direct medical and surgical therapies; and involve a cooperative multidisciplinary team of expert gastroenterologists, surgeons, and radiologists.
These global consensus recommendations are a welcome directive to provide best evidence-weighted recommendations to improve clinical outcomes.

Abstract