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Letter to Editor

Surgical management of perianal fistulizing Crohn's Disease

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Dear Editor,

Crohn's Disease (CD) is a chronic inflammatory bowel disease characterized by recurring symptoms that can result in bowel damage and long-term disability. It is crucial to achieve early diagnosis and appropriate treatment. Perianal manifestations are common in 20%-54% of Crohn's disease patients, with fistulas being the primary symptom in 10%. The presence of perianal Crohn's disease can occur before or after initial diagnosis, and is associated with higher postoperative recurrence, surgical intervention, and shorter recurrence times (1). Other signs of severe disease include smoking, persistent symptoms, frequent flare-ups, emergence of lesions, steroid treatment, and surgery. Around 20% of patients have additional disease areas in the small bowel or ileocolic region (2). Perianal Crohn's disease significantly impacts patients' health and presents significant challenges for healthcare professionals. Perianal Crohn's disease, a common cause of perianal lesions, often presents as perirectal/perianal fistula, with over half of patients having multiple lesions. However, symptoms often lack correlation with objective assessment methods like endoscopy, cross-sectional imaging, or noninvasive biomarkers. Accurate evaluation of fistulae can be achieved through the use of Contrast-enhanced magnetic resonance imaging, endosonography, and examination under anesthesia (EUA). These methods enable the distinction between simple perianal fistulae and complex fistulae (2). Perianal CD fistulas can be simple or complex, with simple fistulas having a single external opening and low lesion. Individuals with CD are more likely to develop complex fistulizing disease, which presents significant treatment challenges. Complex fistulas typically require six procedures, while simple fistulas require three. Draining all fistulas is essential in preventing abscess formation as they all have the potential to cause sepsis (3). About 38% of complex perianal fistulas may require extensive surgical procedures. Treatment aims to establish anatomical structure, eliminate sepsis, and achieve long-term closure of fistulous tracts. Effective treatment often involves a combination of surgical and medical treatments. Perianal Crohn's disease often requires surgical treatment, with some requiring multiple interventions. Complete healing can be challenging, and patients are at a higher risk of severe complications like septic complications, anal stenosis, and incontinence. The condition's complexity, frequent diarrhea episodes, and the need for multiple surgeries can compromise the sphincter complex. CD fistulas can take months or years to heal, despite intensive therapy. Prioritizing the exclusion of perianal abscesses is crucial, and anesthesia-assisted exploration and drainage, preferably by a colorectal surgeon, is effective in preventing localized sepsis progression. Proctitis can impact treatment options and lead to negative outcomes, so it is recommended to include proctosigmoidoscopy in initial evaluations The management of CD perianal fistulas requires a holistic approach that combines medical and surgical interventions.

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Treatment typically involves antibiotics, immunomodulators, and biological medications, with biologics being recommended for severe, active fistulizing disease. Infliximab (IFX) is the most frequently used biologic therapy, with a 55% closure rate after local surgical drainage and IFX treatment for perianal Crohn's disease. The fistula closure is limited, typically lasting around three months. Recurrence rates at one year and five years are 17% and 40%, respectively. Continuation with IFX (double dose) maintenance therapy may have some potential benefits (1). Among adolescents, the response to IFX may show some improvement, with a 70% complete response rate and a 23% recurrence rate following seton drainage and IFX (3). However, the significant number of patients may still require additional surgical intervention due to recurrence, anal stenosis, or abscess formation. Retrospective studies suggest that combining surgical and medical therapy can lead to a more positive healing outcome for perianal fistulae compared to surgery or medical therapy alone. However, there is a lack of randomized controlled trials or prospective studies comparing anti-TNF treatment alone versus a combination of anti-TNF treatment and surgery in treating complex perianal CD fistulae. To close the fistula, seton removal is typically necessary, but the timing remains uncertain. Loose setons can be maintained indefinitely to manage sepsis and reduce symptoms, but may require replacement at some point. Alternative pre-IFX operative interventions like fistulotomy, fibrin glue administration, rectal advancement flap procedure, or defunctioning stoma have shown similar outcomes. Tight Setons are not advised for perianal Crohn's disease due to potential sphincter injury. Fecal diversion through colostomy or ileostomy may be considered in severe therapy-resistant fistulizing disease, but the healing rate of fistulas and closure rate of stomas is limited. Advancement flaps are a surgical technique that involves raising tissue near a fistula's internal opening, eliminating it, and securing it to seal the fistula's high-pressure end and separate the tract from the gut (4). Studies show healing rates ranging from 40-80%, with incontinence rates of about 9% in some cases. Flap procedures aim to prevent external wounds and scarring in the perineal area. Fibrin glue seals the tract by activating thrombin, forming a fibrin clot. This clot may aid wound healing, but there's insufficient evidence. Studies show variability in success rates (10-98%) due to small sample sizes, different techniques, and limited follow-up. Adult Mesenchymal Stem Cells (MSCs), including adipose-derived stem cells (ASCs), have shown potential in treating inflammatory and autoimmune diseases by modulating the immune system and producing beneficial factors like fibrosis reduction, cell death prevention, and blood vessel formation (4). However, further research is needed on the ideal type of MSC, dosage, cell isolation protocol, and injection number. The LIFT procedure, involving the ligation and excision of the intersphincteric fistula tract, has been shown to be effective in treating Crohn's perianal fistulas, with a 67% success rate at 12 months, with no reported incontinence incidents in a limited sample size of 15 patients (4). Video-Assisted Anal Fistula Treatment (VAAFT) is gaining popularity due to its 80% success rate (8 out of 10 cases) when combined with an advancement flap. Perianal fistula management involves multidisciplinary teamwork from radiologists, gastroenterologists, surgeons, and IBD specialist nursing staff. Goals include resolution of fistula discharge, continence preservation, and avoidance of proctectomy and stoma. Treatment includes non-cutting Seton placement, antibiotics, and anti-TNF therapy.

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