

# Chapter 4

## IBD: Management of a Painful Anal Fissure and Skin Tags in Patients with Crohn's Disease

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### Introduction

Perianal manifestations of CD disease are usually chronic in nature, and often characterized by waxing and waning symptoms. The goals of treatment are typically achieved through multimodal management, which minimizes ablative surgical intervention and preserves the sphincter complex [1, 2]. While there is a spectrum of severity in the observed impact of perianal CD, even the minor issues of skin tags and fissuring can present the clinician with difficult decisions in management. In this chapter, we have attempted to provide some clarity to the decision process.

**Question** What is the best way to manage a painful fissure and skin tags in the setting of a patient with known Crohn's disease?

Fissures are identified in 19% of patients with CD and although they were historically thought to be painless, 40–85% of anal fissures in CD patients are associated with pain [1]. Additionally, persistent, unhealed fissures can lead to perianal abscess/fistulae in up to 20% of patients with CD; this presents quality of life issues for the patient and a treatment dilemma for the surgeon [2]. Classically, the pathognomonic, 'elephant ear' or 'cock's comb' skin tags associated with CD are usually painless. However, skin tags that don't have the classic appearance are more likely to be associated with a chronic fissure, which is commonly characterized by pain. The long standing teaching has been to avoid removing these skin tags for fear of much more significant complications such as anal stenosis, sepsis or fecal inconti-

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nence [3–5]. The primary thrust of this chapter will focus solely on the management of the painful anal fissure, rather than the incidental tag.

When chronic anal fissures in patients without CD fail to respond to conservative measures, limited lateral internal sphincterotomy (LIS) is performed with a high degree of success and limited morbidity. In the setting of active anorectal CD, however, even a minor anorectal procedure may carry an enhanced risk of morbidity, including wound complications, anorectal sepsis, fistulous disease and incontinence [1, 6]. Thus, a significant degree of caution must be applied when managing the refractory symptomatic fissure in the setting of CD.

## Search Strategy

A MEDLINE search was conducted for the past 25 years (1990–2015) secondary to the paucity of the literature. Search terms included ‘anal, fissure, Crohn’s, and perianal, inflammatory bowel disease, skin tag’. Table 4.1 summarizes the population, intervention, comparator, and key outcomes (PICO) for the patient population.

## Data Review/Recommendations

A review of the literature is summarized in Table 4.2 and the quality evaluated using the GRADE system. The studies in the literature are all retrospective small studies with little power and no standardization of outcomes. Only a single study compared botulinum toxin (Botox) to LIS after failure of medical management. D’Ugo et al compared Botox with or without fissurectomy to LIS. However, in patients with confirmed CD, Botox was performed instead of LIS and therefore there is no comparison between Botox and LIS in known CD patients [2]. Lozynskyy et al reported a 75% healing rate with medical management in CD patients and reported they had not performed surgical treatment of a fissure associated with CD in the last 5 years of their study [7]. Fleshner et al reported a 50% healing rate with medical fissure management. They then compared fissure healing rates when patients underwent anorectal procedures versus bowel resection for proximal disease. They showed an

**Table 4.1** PICO table for painful fissure associated with Crohn’s disease

Patient population	Intervention	Comparator	Key outcomes
Patients with Crohn’s disease and painful anal fissure	Lateral internal sphincterotomy (LIS)	Conservative medical management (including Botox injection in internal anal sphincter)	Morbidity, pain resolution/healing, need for additional intervention

**Table 4.2** Literature reported outcomes and quality of evidence

Study	Patients (n)	Interventions (n)	Outcome classification	Healing (%) medical management	Healing (%) surgical management	Morbidity (%) surgical treatment	Quality of evidence (GRADE)
D'Ugo (2013) [2]	41, CD (22 with definitive diagnosis)	Medical management (27), surgical treatment (Botox/fissurectomy vs LIS; 14)	Healing rate, complication rate	65.8	78.5% (recurrences)	57.1	Very low quality
Lozynskyy (2009) [7]	60 CD	Medical management (45), surgical treatment (Maslyak's method; 15)	Healing rate	75	NR	NR	Very low quality
Fleshner (1995) [8]	56 CD (49 symptomatic)	Medical management (35), surgical treatment (LIS, fissurectomy, bowel resection; 15 (8 anorectal))	Healing rate	50	67	NR	Low quality

88% healing rate with anorectal procedures (LIS, fissurectomy) versus 43% with proximal bowel resection for active ileal or colonic CD [8].

Several additional retrospective studies have been performed but very little outcome data exists. For example, Wolkomir et al evaluated 25 CD patients undergoing 27 procedures for anal fissure. However, they did not directly report on the healing or complication rates in their study. They did describe a mean follow up of greater than 7 years and noted that 22 patients had a healed wound by 2 months; however, 11 patients subsequently developed anorectal pathology of whom three developed recurrent fissure [9]. Similarly, Sangwan et al studied 21 patients with anal fissure of whom six underwent LIS and one underwent fissurectomy. However, again, no outcome data was reported in this study [10].

Although it is stated in many review articles that LIS should be reserved for patients without active anorectal CD [1, 6, 11], active CD simply has not been assessed as a study variable in any recent literature. This may be because it is assumed to be unsafe to proceed with LIS in the setting of active CD. However, this assumption may not be valid, especially in the era of biologic treatment for CD, and should be validated in future studies.

In summary, there is a paucity of literature evaluating medical versus surgical management of painful Crohn's fissures. Additionally, the literature to date consists of low to very low quality retrospective studies with incomplete outcome data. To further clarify the treatment algorithm in the presence of CD, new, well-designed studies are needed, especially those comparing Botox to LIS in patients who have failed conservative medical management.

## Personal View of the Data

Our approach to painful anal fissures in CD revolves around treating the underlying CD first in the setting of active anorectal CD. Multidisciplinary management is standard and medical management (eg biologics) is the first line treatment for perianal disease associated with CD. Conservative management to treat anal fissures is employed including optimization of bowel habits and a trial of topical nitroglycerin paste or calcium channel blocker cream. In the presence of a CD fissure failing medical management, Botox (20–50 units) can be injected on either side of the fissure into the internal sphincter muscle or in the intersphincteric groove for temporary paralysis. If Botox injection does not result in healing of the fissure, continued medical management should be undertaken with fecal diversion only as a last resort to palliate symptoms. LIS is not performed in the presence of active anorectal CD.

In patients without active anorectal disease, the algorithm is essentially the same as for patients without a diagnosis of CD. Medical management is attempted as a first line and followed by Botox injection or LIS in the event of an unhealed fissure (Fig. 4.1). Even in the apparent absence of active anorectal CD, the presence of an atypical fissure, or a fissure located anywhere other than the anterior- or posterior-midline, should raise suspicion for CD involvement.

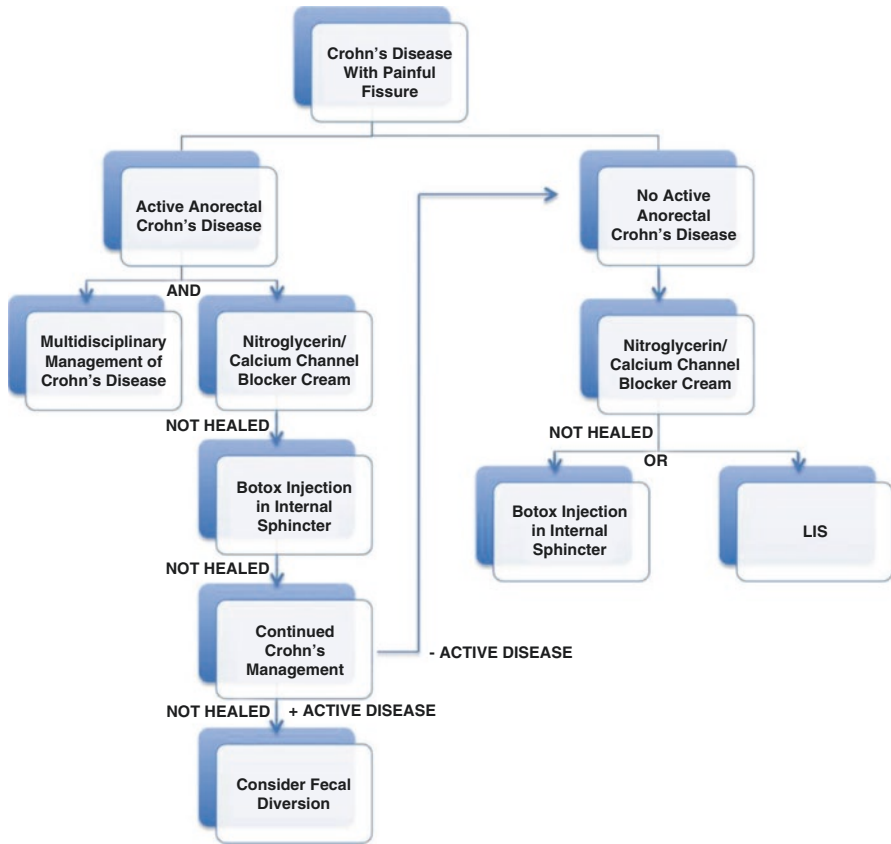


Fig. 4.1 Algorithm for management of fissure associated with Crohn's disease

In patients with Crohn's disease and asymptomatic anal fissure, medical management should be initiated. Surgical intervention is reserved only for patients with a persistent or recurrent fissure *without* evidence of active anorectal Crohn's Disease (evidence quality very low, weak recommendation).

## References

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