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Review Article

Concepts and Emerging Trends in Management of Fistula in Ano: Review

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ABSTRACT

Fistula in Ano is one of the common anorectal conditions that clinician encounters in day to day practice and is difficult to treat. There are many emerging treatment options and it is important to review recent and old methods regularly, and to upgrade about the recent treatment options.

This article will review the approaches both classical and recent one and will also focus on planning the treatment by categorizing Fistula in ano into simple which are anatomicaly low and complex which are higher, and treatment is individualized in complex cases.

Keywords: Management, Fistula in Ano, Complex, Simple.

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INTRODUCTION

Fistula in Ano is a common anorectal condition that clinician encounters in day to day practice and is difficult to treat. With the advent of newer antibiotics and surgical procedures anorectal sepsis can be managed but issue of continence preservation is still challenging and there are ongoing efforts to achieve the most suitable treatment plan.

CLASSIFICATION

According to American Gastroenterological Society fistula may be simple or complex. Simple fistulae are low lying and involve a little or none of the part of the sphincter. Simple fistula may further be superficial, Inter sphincteric or Trans sphincteric. Usually the tract is single, does not involve any other organ and is not associated with radiation or any inflammatory bowel disease. However complex fistulae occupy anatomically higher position, involving a large proportion of sphincter, may have more than one tract, and may be associated with inflammatory bowel disease, radiation or have involvement of other organs.[1]

Simple Fistula - Superficial fistula

Superficial or simple fistulas that, do not cross any or cross slight portion of the sphincter should be treated with fistulotomy. This is a traditional, successful approach with a success rate that approaches almost 100%, with negligible or no effect on incontinence.[2] Fistulotomy involve opening of the fistula tract and curettage of the tract. There is data to support that healing is quicker with marsupialization of the tract.[3] Intersphincteric fistulae arise from cryptoglandular infections that remain contained between the internal and external sphincters. Partial division of the internal sphincter is safe. This technique involves cutting a portion (not more than 1/3) of the internal sphincter only, maintaining continence. If an intersphincteric fistula involves a significant portion of the internal sphincter (more than 1/3) then one should resort to sphincter sparing-type procedure as incontinence can result if too much internal sphincter muscle is divided.

Complex fistula

Fistulae that cross a major part of both sphincter muscles are termed trans-sphincteric and are part of the group of complex fistulae. Lay-open fistulotomy in this type may result in significant changes in continence. Complex fistula treatment must always take in to account the need to spare sphincter function. Various treatment options exist and the treatment should be individualized.

MANAGEMENT

Seton Insertion

Initial management of complex or trans-sphincteric fistulae begins with control of the septic focus. Initially this may involve drainage of anorectal abscess, and if the fistula tract can be identified, a draining seton should be placed. Another option is the use of a cutting seton. This allows slow division of the muscle leading to fibrosis and scarring and also maintains the sphincter complex. The technique involves serial tightening of the seton through the fistula tract by way of placement of additional suture material on the seton once every few days, or by tightening of the original seton.[4]

Advancement Flap Repair

The endoanal advancement approach encompasses advancing a healthy sleeve of rectal wall over the cleaned internal opening, and suturing the flap over and distal to the internal opening. Success rates for this approach vary widely through the literature, and range from 0 to 63%. A retrospective study by the Cleveland

Clinic, Florida found only a 33% recurrence rate for flaps used in non-inflammatory bowel disease (IBD) patients. Zimmerman reported on his group's success with anodermal advancement flaps and found that when used as initial therapy, this method had a greater than 75% success rate, with maintained continence in over 80%. Importantly Mitalas found that repeat approaches using endoanal flaps still had a significant success rate, with 67% of patients having long-term success.[5-8]

Fistulectomy[9]

Fistulectomy is a not a preferred technique for trans-sphincteric fistulae. It leads to removal of the chronic, epithelialized tract thus allowing healing by secondary intention. Success rates are similar to fistulotomy, and subsequent incontinence rates have been shown to be as high as 15%.

Fibrin Glue As Sealent

Fibrin glue injection is one of the newer sphincter-sparing approaches for complex fistulae. The technique comprises of injecting a liquid fibrin matrix through any fistula tract which would facilitate healthy tissue ingrowth and fistula closure. It has disappointing results with success rates as low as 16%.[10-14]

Anal Fistula Plug[15-19]

The anal fistula plug (AFP) does not involve wide spread dissection and thus is a very safe option. The plug is pulled through the fistula tract and placed at the internal opening and trimmed to the skin at the external opening with the external opening left open to drain.

Ligation of Inter Sphincteric Fistula Tract (Lift & Bio lift)[20,21]

In this the fistula tract is identified between the internal and external sphincters (intersphincteric space) and subsequently divided and ligated. There have been reports from North America and Malaysia - which show lower success rates of 57% and 77%, respectively. Recently, a modification of the LIFT procedure has been described. After the fistula tract is identified and divided, a biologic mesh is placed in the intersphincteric space to act as a barrier to re-fistulization.

CONCLUSION

Fistula in Ano is an anorectal conditions that clinician encounters in day to day practice and is difficult to treat. Treatment options are emerging with time. Complex fistula treatment should be individualized taking into account the preservation of continence.

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