



Outcome of the Ligation of Intersphincteric Fistula Tract (LIFT) in the Treatment of Anal Fistula: Initial Results

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Abstract

Background: The abscesses and anal fistulas represent about 70% of perianal suppuration, is represented by abscesses & anal fistulas and has 5% of queries in coloproctology. Its incidence is 1/1000 inhabitants per year.

Aims: To assess the intersphincteric ligation technique of the fistulous tract in the treatment of anal fistula.

Methods: The records of 16 patients who underwent this technique, evaluating age, gender and presence of incontinence were studied.

Results: 4 patients were men and 12 women. The mean age was 42.8 years. Of these, 7 (87.5%) had complete healing of the fistula; 6 were cured only with this procedure and 1 required additional operation with simple fistulotomy. Only 1 patient developed fecal incontinence which was documented by anorectal manometry. There were no deaths.

Conclusion: the intersphincteric ligation technique of the fistulous tract proved to be effective for the treatment of anal fistula and has eventual fecal incontinence.

Keywords: Anal fistula, Fecal incontinence, Surgery.

Introduction

About 70% of perianal suppuration, is represented by abscesses and anal fistula with an estimated incidence of 1/10,000 inhabitants per year and represents 5% coloproctology queries.

Anal fistula is the chronic phase of anorectal infection is characterized by chronic purulent drainage or cyclic pain it is associated with acute relapse of the abscess followed by intermittent spontaneous decompression². About 65% of

patients with perianal abscess will develop chronic or recurrent anal fistula. The operation for correction of anal fistula aims preservation of continence mechanism.

Among the current treatment options are: fistulotomy, application of fibrin glue, endorectal advancement flap, VAAFT (video-assisted technique) and ligation of the intersphincteric fistula tract (LIFT)³.

The cure rate of fistulotomy is 0-64%, with 17% about of incontinence³. Use of fibrin glue cure up to 60% and does not cause incontinence³. Endorectal advancement has a cure rate of 98% with incontinence of up to 35%³. VAAFT a cure of about 85% without incontinence⁴

In 2007 Arun Rojanasakul et al. Department of Colorectal Surgery, Chulalongkorn University, Bangkok, Thailand, developed the technique Ligation of the Intersphincteric Fistula Tract (LIFT)⁵. The central idea of this procedure is that the excision and ligation of intersphincteric tract can occlude the entry of faecal particles in the fistula and, at the same time, eliminate the septic focus intersphincteric. This can be cure of anal fistula. This procedure plans to maintain the anal sphincter intact, preserving continence postoperatively^{3,5}.

The treatment of anal fistula is mainly surgical to eliminate the fistula, prevent recurrence and also to preserve continence of anus. However, among the various alternatives for the treatment of anal fistulas⁵, until the moment, none of them is considered as the technique of choice due to their recurrence rates and incontinence.

Therefore, as there is no rigid model of choice of surgical treatment to be used, the current trend is that the techniques with preservation of the anal sphincter, as the LIFT and VAAFT, gain more space in the treatment of anal fistulas.

The objective of this study is to present the initial results in medium term the use of LIFT in the treatment of these fistulas.

Methods

The study was approved by the Ethics Committee in Research of the Hospital Regional de Mato Grosso do Sul, Campo Grande, MS, Brazil. All patients were informed by the surgical team about the technique to be used, expected outcome and complications. It was a prospective study.

The group included in this study was composed of men and women suffering from perianal fistulas cryptoglandular transphincteric without any surgeries in the past, aged about 21-68 years

belonging to the service of coloproctology of Hospital Regional de Mato Grosso do Sul, in the period from March 2011 to July 2013. Patients with perianal fistulas from another source, Crohn's disease, tuberculosis, cancer and recurrent anal fistulas as well as those that were previously operated by another surgeon were excluded.

All patients underwent two surgical steps.

The first step, after spinal anesthesia the patient in the Lloyd Daves position, held intraoperative verification of the fistula, by passing through the external hole a stylus to check it in the inner hole. In all cases, the fistula was characterized as transphincteric. Once the path was realized the first operative step which consisted is passing wire seton (five strands of cotton thread) that were tied together with manual surgical knots.

The second step was between 4-6 weeks after the first. The position of the patient and anesthetic technique were equal. Before removing the seton, new exploration of the fistula was performed with stylus. There was no cases of emergence of a "new path" in this period. Proceeding with the removal of seton started the LIFT technique. From the path palpated after removal of seton, was that of a transverse incision medial to the external orifice of the fistula allowing meticulous dissection with scissors and electrocautery. Exposing the intersphincteric plane was facilitated using surgical retractors type Farabeuf. The intersphincteric path was ligated at two points: one on the emergence of the internal sphincter, and other on the external sphincter with polyglactin 2.0. After that, the remaining intersphincteric tract was resected in order to prevent infected tissue remaining in the wound. The path of the fistula was again curetted and confirmed the effectiveness of ligation with no penetration of the anal canal curette by occlusion of the fistula point of emergence of the internal sphincter muscle. The external hole was left open to heal by secondary intention and also that this period could promote good drainage of the surgical wound (Figures 1 e 2).



Figure 1:- The yarns are repairing the fistula tract: the right one next to the edge of the internal sphincter and the left is by the external sphincter



Figure 2: The second step of the technique, with correct identification of the fistula tract

After discharge, patients has first follow-up visit 15 days after the initial procedure. The second consultation was on the day45. It was considered cured in patients who denied leaking stool by wound. Those who in the second query still had symptoms of anal fistula were instructed to maintain the basic care of postoperative proctologic operations and reuisset within 30 days. It was considered that the recurrence after the third query still had symptoms of anal fistula. For these cases, it was proposed new surgical procedure which may or may not be LIFT again. The presence of perianal abscess in any query postoperative was considered as complication and its treatment was recommended the use of quinolone for 14 days and subsequently revalued by the surgical team.

Those was had sphinteric injury during surgery had incontinence.

Results

In the analyzed period, 16 patients were referred for surgical treatment by LIFT technique. In outpatient scheduled for 15 days after discharge, all evolved satisfactorily without any need for early re-intervention for drainage of abscess.

In the new review, 45 days after the first visit, 12 patients were considered cured; only 2 had leakage of fecal contents through the orifice of the fistula; another complained of incontinence.

Those with leakage from the opening of the fistula where requested to requisite in 30day and due to the permanence of the complaint, was opted for surgical intervention with fistulotomy, the cure of the condition.

Patient with fecal incontinence were requested rectal manometry that confirm this diagnosis.

Discussion

Huda e Ashok⁶ reviewed the initial publication in order to establish more rigid inclusion criteria to identify patients who would benefit from the operation for fistula repair by LIFT technique. It achieved 100% success in fistula closure after the

first procedure and there was no anal incontinence.

In a prospective study of 18 patients sileri et al achieved a cure rate of 83% with only three recurrences - the complementary treatment was fistulotomy in one patient and endorectal advancement for other two- with subsequent complete healing of the fistula. There were also no cases of incontinence in this study.

Makhlouf and Korany⁸ in a series of 30 patients (25 men), mean age of 36.5 years who underwent LIFT showed complete cure rate of 90%; one patient presented with abscess six months after the initial procedure and three presented with recurrence. There were no cases of incontinence in one of them.

LIFT has results that prove its effectiveness. The articles cited are consistent with this publication regarding the positive outcome of the technique, which stimulates to use LIFT when needed. Perhaps the key to that cure rates reach 100%, is the strict selection of patients in whom the characteristics of the fistulas are favorable to the use of this technique.

Due to the benefits mentioned, the LIFT technique has assumed a good surgical space it should remain considerable one in relation to the various treatment options for anal fistula. It is expected that further publications with larger sample size to confirm the effectiveness of LIFT encouraging, more and more surgeons to use this technique.

Conclusion

The Ligation of Intersphincteric Fistula Tract (LIFT) technique is effective for the treatment of anal fistula.

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Conflicts of Interest: None

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