Ligation of the intersphincteric fistula tract. Our results

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ABSTRACT

Introduction: there are various techniques for the surgical treatment of anal fistulas, with variable results. The ligation procedure of the intersphincteric fistulous tract (LIFT) consists of dissecting the space between both sphincters to locate the fistulous tract and proceed to its ligation and section.
Objective: to evaluate our results with the LIFT procedure for the treatment of transsphincteric anal fistulas. Design: retrospective, cross-sectional observational study.
Material and methods: all patients with transsphincteric fistulas treated with LIFT from January 2013 to December 2020 were included. Postoperative follow-up was carried out for up to 2 years.
Results: sixty-two patients underwent surgery. The predominant sex was male. There were 47 patients with low transsphincteric fistulas and 15 with high transsphincteric fistulas. After identifying the fistulous tract in the intersphincteric groove, both ends were ligated and the tract was cut. Finally, curettage of the tract through the external orifice was performed. Five patients (8%) presented skin dehiscence at the level of the intersphincteric groove incision, managed conservatively. This group had a longer healing time of four weeks. Recurrence occurred in 22 (35.5%) patients.
Conclusion: the LIFT procedure appears to be an effective and safe alternative for the treatment of low and high transsphincteric fistulas, since it does not alter the anatomy or continence.

Keywords: LIFT, high and low transsphincteric fistulas

INTRODUCTION

Anal fistulas are abnormal pathways of communication between two epithelial-lined surfaces. In a very high percentage the tract communicates an internal orifice located in the pectinate line of the anal canal (primary orifice) with one or more orifices located in the perianal skin (secondary orifice). Other minimum percentage generally communicates with the rectum. They are more frequent in man with a ratio of 2:1 and more than 90% are of unspecific primary etiology due to obstruction and infection of the ducts.1

According to Parks et al.[2] fistulas can be classified into: 1) intersphinteric (70%); 2) high and low transsphinteric (30%); 3) suprasphinteric (5%); 4) extrasphincteric; 5) submucosal.

To assess the fistulous tract Goodsall's rules are followed and the treatment is always surgical. The objectives of surgery are: 1) to preserve anal continence; (2) avoid recurrence; 3) shorten the patient's recovery.[1-3]

For the surgical treatment of anal fistulas the secondary orifice, the location of the fistula tract with respect to the anorectal ring and the internal orifice should be identified.1,3 Treatments are varied and depend on the type of fistula. The most frequently used include: 1) fistulotomy, 2) fistulectomy, 3) seton placement, 4) advancement flap, and 5) ligation of the intersphincteric fistula tract (LI FT).

The LIFT technique is a sphincter-saving procedure. The main concept consists in identifying the course of the fistula in the intersphincteric groove with its subsequent ligation and division. There is no division of the sphincter muscle so in principle continence should be preserved. This technique has been used in low and high transsphincteric fistulas, as well as in suprasphincteric and extrasphincteric fistulas.[4-7] It is also to be considered when there is preexisting incontinence. Contraindications include active perianal sepsis, active inflammatory bowel disease and malignancy.

The aim of this study was to evaluate our experience with the LIFT technique for the treatment of transsphincteric fistulas.

MATERIAL AND METHODS

The medical records of patients with transsphincteric fistulas operated on with the LIFT technique by the Coloproctology Service of the II Chair of Surgical Clinic from January 2013 to December 2020 were retrospectively reviewed.

Spinal anesthesia was used in all procedures. The proximal and distal ligation of the fistulous tract was performed with Poliglactin 910 (Vycryl® 1 or 0) and the tract was divided between both ligations. Finally, the distal end of the tract was scraped from the external opening and the skin incision was closed with interrupted sutures (Fig. 1).

The patients were discharged the same day. Follow-up was carried out during the first and second weeks and then monthly in all cases until 24 months (Fig. 2).

Patients with intersphincteric fistulas, fistulas with active infection or associated inflammatory bowel disease were excluded.

RESULTS

Sixty-two patients, predominantly male, with a mean age of 45.5 (range: 23-67) years, underwent the LIFT procedure. Forty-seven had low transsphincteric fistulas and 15 had high transsphincteric fistulas.

Skin suture dehiscence occurred in 5 (8%) patients with high transsphincteric fistula, which was managed conservatively with local dressings. These patients had a delay in healing, which was complete one month after surgery. In the rest of the patients, complete healing was observed in the second week of postoperative follow-up.

Twenty-two patients had recurrence.

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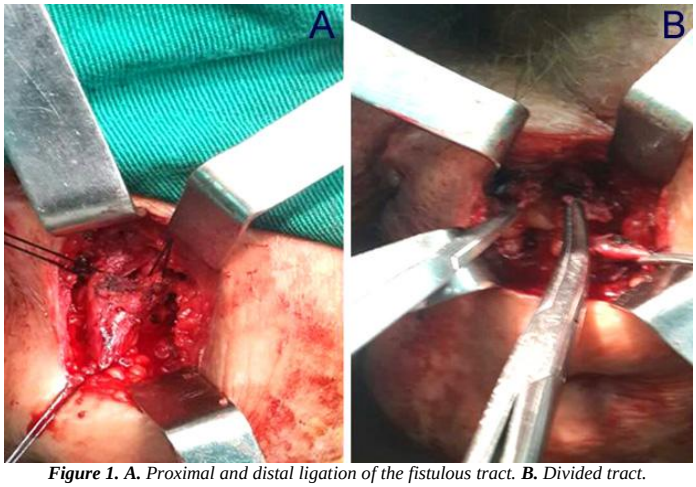

Figure 1. A. *Proximal and distal ligation of the fistulous tract.* ***B.*** *Divided tract.*

Figure 2. A. *7th postoperative day.* ***B.*** *14th postoperative day*

DISCUSSION

The average age and male sex were similar to what is reported in the literature on anal fistulas. This procedure, first proposed by Rojansakul et al. in 2007,[8] focuses on ligation of the intersphincteric fistula tract and can be used for complex and recurrent fistulas. According to these authors, the success of the procedure is approximately 90%. In our series, with different volumes, it was 65%.

Shanwani et al9 report the results of this procedure in 45 fistulas (33 transsphincteric, 12 complex), 5 of them recurrent. After a median follow-up of 9 months (range, 2-16), the primary cure rate was 82%, with a median healing time of 7 weeks (range, 4-10). Recurrence occurred in 8 patients (18%) over a period of 3 to 8 months, without significant morbidity. Comparatively, our patients had a greater recurrence and, in turn, more accelerated wound healing, which could be due to the higher proportion of low transsphincteric fistulas in our series.

CONCLUSION

LIFT was shown to be a safe and effective technique for the treatment of low and high transsphincteric fistulas. We found faster healing in this procedure compared to traditional ones. It offers better wound management, shorter recovery period, greater patient comfort and therefore better quality of life.

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