

## Comparative Study on Efficacy of Fistulotomy and Ligation of Intersphincteric Fistula Tract (LIFT) Procedure in Management of Fistula-in-Ano

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### Abstract

**Background:** One of the most often seen benign anal diseases in general surgery is fistula in the ano. This research intends to examine the differences between the results of open fistulotomy and those of the ligation of the intersphincteric fistula tract (LIFT) surgery.

**Methods:** Sixty people were analysed in a year-long comparative research at the Department of Surgery. The research comprised people of both sexes who had been identified as having an anal fistula. Individuals having a history of fistula formation, Cancer of the distal rectal region, Crohn's disease, and other butt-centered diseases were not considered. Data analysis made use of descriptive statistics, a t-test, and the Fischer exact chi-square test.

**Results:** The participants' mean ages were 458.05 for the fistulotomy group and 408.65 for the LIFT operation group. According to the breakdown by sex, there were twice as many men as females (20). There were 26 inter-sphincteric fistula and 4 trans-sphincteric fistula in the fistulotomy group, whereas there were 25 inter-sphincteric and 5 trans-sphincteric fistula in the LIFT group, respectively. Just one patient in the fistulotomy group (4%) and two patients in the LIFT group (8%) were found to have a wound infection. Two patients in the fistulotomy group had ano-incontinence. Fistulotomy typically required 8 weeks of recovery time, but the LIFT surgery required just 4. In the LIFT group, four patients had recurrence whereas the fistulotomy group had none.

**Conclusions:** Compared to open fistulotomy, the recovery period for the LIFT surgery is quicker, and the risk of postoperative anal incontinence is reduced, making it the preferred treatment option for fistula in the urethra.

**Keywords:** Anal Incontinence, Fistulotomy, Intersphincteric Fistula, LIFT Procedure.

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### Introduction

Epithelization connects the rectal mucosa to the perineal skin, forming a peculiar layout known as a fistula-in-ano [1]. The final 4 centimetres of the clean piece of land is the

butt-centric watercourse. Being an extension of the rectum, it begins in the upper body. The butt-centric boundary marks the terminus of the channel and delineates its true

level, which is felt rectally in normal people [1]. A perineal fistula is a fissure in the skin surrounding the privates caused by granulation tissue that has formed an association with the butt-centric waterway (rectum) in a very deep and rapid manner [2].

Proper management of fistula-in-ano, notwithstanding, focuses on eliminating sepsis while maintaining self-control [3]. For simple low fistulas with a submucosal plot that lies in the lower third of the external butt-centric sphincter, a fistulotomy is the treatment of choice. The fistulous tract may be uncovered with a fistulotomy, leaving smaller, more quickly healing epithelized lesions in its wake. The healing period for fistulotomy wounds may be accelerated by using a technique called marsupialization [3]. The LIFT (Ligation of the intersphincteric fistula plot) technique is an unobtrusive, innovative sphincter-saving invention that is simple to learn and perform, and may be useful in recurrent situations [4].

## Method

After getting approval from the Institutional Ethics Committee, we conducted a one-year (January–December 2022) long, prospective, randomised, comparative, single-focused study among 60 patients attending the General A Medical Procedure Outpatient Observational Care (OPD) who met the inclusion and exclusion criteria. All participants provided written informed consent through a purposeful sampling approach. Reviewers kept in mind all subjects, regardless of sex, who were diagnosed with butt-centric fistulas. Individuals having a history of butt-centric or distal rectal malignant growths, Crohn's disease, or intermittent fistulas were excluded from the analysis.

Using a computer-generated random number table, all of the study participants were randomly assigned to either the fistulotomy

group (n=30) or the LIFT system group (n=30). All patients are instructed to follow a light eating plan and take a mineral purgative on the day before their scheduled medical treatment. Each individual had a rectal cleansing with regular faucet water the night before their medical treatment.

Skills that can be put to use subtly Under spinal sedation in the lithotomy position, all methods were implemented. At the outset of sedation, all patients received a single dose of 1g of a third-generation cephalosporin intravenously. The fistula package in group I may be safely opened; any drainage from the margins should be eliminated through burning; and a cotton dressing was applied. Bundle II's intersphincteric analysis is performed close to the outside sphincter to avoid cutting into the muscular lining of the internal organ.

Standardized working time, postoperative wound infection, postoperative butt-centric incontinence, postoperative standard recovery time, and recurrence rate were used to assess the success rate.

We analysed the results using descriptive statistics, the unpaired t-test, and the Fischer exact chi-square test.

## Results

During the one-year focus period, 30 patients had open fistulotomy and LIFT (ligation of the intersphincteric fistula parcel) technique was done on 30 patients for evaluation. The respondents' mean ages were 45.18.05 and 40.38.65 years for the fistulotomy group and the LIFT technique group, respectively. There were 40 men and 20 ladies in the orientation group.

The fistulotomy group had 26 intersphincteral and 4 trans-sphincteral fistulas, whereas the LIFT group had 25 intersphincteral and 5 trans-sphincteral fistulas (Table 1).

**Table 1: Demographic data**

Parameters	Group I	Group II
Age(mean±SD)(inyears)	45.1±8.05	40.3±8.65
<b>Gender</b>		
Male	14	30
Female	6	10
<b>Typeoffistula</b>		
Inter-sphincteric	26	25
Trans-sphincteric	4	5

Compared to the average operating time of 28.4 minutes for the LIFT surgery, the fistulotomy procedure took much less time at 19.6 minutes. The typical recovery period for fistulotomy was 8 weeks, but the LIFT surgery only required 3 weeks. One patient (4%) in the fistulotomy group and two patients (8%) in the LIFT group were diagnosed with a wound infection. One person in the fistulotomy group had incontinence at the site of the incision (4%). Just 3 of the participants (12%) who had the LIFT surgery experienced a recurrence, whereas none of the subjects who underwent the fistulotomy operation did (Table 2).

**Table 2: Assessment parameters**

Parameters	Group I	Group II	P value
Average operative time(minutes)	20.1±4.06	26.1±5.05	0.011
Average healing time(weeks)	8	4	0.040
Wound infection	2	3	0.035
Anal incontinence	1	0	-
Recurrence	0	4	-

## Discussion

Careful administration for a perianal fistula aims to eradicate active and recurrent septic foci, associated epithelialized plots, and preserve self-control [5]. Fistula-in-ano therapy is very individualised and should be guided by the doctor's clinical judgement and experience.

This review's findings that LIFT (ligation of the intersphincteric fistula lot) required significantly more time in the operating room than fistulotomy (p 0.011) are consistent with those from a previous review by Sakda An *et al* [6]. in which 48 and 37 patients, respectively, underwent these procedures.

Two patients in the fistulotomy group and three patients in the LIFT group developed wound disease (p 0.035). Similar to a study by Yardimci E *et al* [7] in which fistulotomy and the LIFT procedure were both completed

in 15 patients. Compared in this study, the average time to recovery for the two groups was drastically different (p 0.040). Yardimci E *et al* [7] conducted a review and found similar results. The results of a research by Yardimci E *et al.* and another by Sakda An *et al* [6,7] show a strong correlation between butt-centric incontinence after fistulotomy and the LIFT technique.

Sakda An *et al* [6] Elkaffas [8] 13/15 (87%) and Vinay and Bala subrahmanya [9] 22/25 (88%), all found that repeat saw in LIFT system bunches correlated well with their studies.

Our evaluation is limited by a few factors, including a small sample size and the fact that it was conducted in a single hospital. It is very desirable to do further research into

evaluating these systems and find ways to overcome the aforementioned limitations.

### Conclusion

When comparing the LIFT method to open fistulotomy, the former is the preferred option because of its shorter recovery time and reduced incidence of postoperative butt-centric incontinence.

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