EVALUATION OF NEW SURGICAL PROCEDURE 'LIFT' (LIGATION OF INTERSPHINCTERIC FISTULOUS TRACT) IN THE MANAGEMENT OF A SUBSET OF PATIENTS WITH FISTULA–IN-ANO

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ABSTRACT

BACKGROUND
Fistula-in-ano is a common surgical condition managed in general surgical department, treated with various surgical methods with many efforts to avoid injury to anal sphincter and improve the outcomes in terms of fistula healing and prevent recurrences.

AIM
To evaluate the results of LIFT procedure in selective fistula patients to know its effectiveness in the management of fistula-in-ano.

METHODS
12 patients who underwent this procedure were evaluated. This prospective study was conducted over a period of one year after careful selection of patients with transsphincteric fistula with fixed inclusion and exclusion criteria.

RESULTS
Out of 12 patients, 10 patients were male and 2 were female. The mean age was 38.6 years. Of these, 9 patients were healed completely without any complications. One patient developed abscess which was drained later. One patient required additional procedure in the form of simple fistulotomy. One patient developed transient flatus incontinence which subsided later. One patient developed recurrence in 6 months.

CONCLUSION
This analysis indicates that the LIFT procedure is primarily effective for transsphincteric fistula patients with an overall fistula closure of 91.66% with low impact of sphincter damage and recurrence rate of 8.33%.

KEYWORDS
Fistula-in-Ano, Perianal Sepsis, LIFT Procedure.

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INTRODUCTION: Fistula-in-ano is the chronic phase of anorectal infection characterised by chronic purulent discharge, cyclical pain with acute relapse of the abscess, followed by intermittent spontaneous decompression. About 65% with perianal abscess will develop chronic or recurrent fistula-in-ano.

Abscess or fistula represents about 70% perianal suppuration with an estimated incidence of 1 in 10,000 populations per year.(1)

The current surgical options are fistulectomy, fistulotomy, partial excision and Seton insertion, application of fibrin glue, VAAFT and ligation of intersphincteric tract.(2)

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The cure rate of fistulotomy is 0-64 with up to 17% incontinence.(3) With the use of fibrin glue, the cure rate is 60% with no incontinence. With endorectal advancement flap, the cure rate is 98%, but incontinence is up to 35%. VAAFT cure rate is 85% with no incontinence.(4)

In 2007 Arun Rojanasakul et al, Department of Colorectal Surgery, Chulalongkorn University, Bangkok Developed the technique Ligation of Intersphincteric Fistula Tract (LIFT).(5) The central idea of this procedure is excision and ligation of intersphincteric tract to avoid the faecal contamination of fistulous tract and elimination of septic focus in the intersphincteric space. This could result in healing of fistula and maintenance of continence by avoiding sphincter damage.(3,5)

The treatment of fistula-in-ano is mainly surgical with an object to encourage healing and avoid recurrence and incontinence. Among the various surgical options available, none of them are ideal for good results or free of complications. More over fistula-in-ano has wide verities of presentation with complex anatomy.

Therefore, as there is no rigid model of choice to be used the current trend is to use less invasive and less traumatic procedures like LIFT and VAAFT with no injury or minimal injury to the sphincter.

In this regard, the main objective of this study is to see the results of this LIFT technique in a subset of anal fistulas, that is transsphincteric fistulas.

METHOD: The study was conducted in district general hospital attached to medical college in Vijayawada. Study was approved by ethical committee and funding was done by researchers. Informed consent was taken from all patients about the new technique and its possible complications.

The patients selected for this study include both male and female aged between 20 to 70 years with transsphincteric anal fistula of more than 3 months duration. All patients had MRI scan of anorectum.

All complex fistulas with multiple external openings of more than three, water-can perineum, associated with diseases like Crohn's, tuberculosis and cancers and recurrent history are excluded from the study.

Fistulas having acute suppurative collection with acute inflammation in the supralevator space or in the intersphincteric space are excluded due to technical difficulty to ligate the tract.

Surgical Technique:

1. Identification of internal opening and fistula by passing thread or thin plastic feeding tube.
2. Incision at intersphincteric groove.
3. Dissection through intersphincteric plane to isolate the tract.
4. Suture ligation of intersphincteric tract.
5. Excision of the tract in the intersphincteric plane.
6. Curette fistula from external opening.

RESULTS: All 12 patients who underwent LIFT procedure were discharged on the 1st and 2nd postoperative period with good satisfaction of the patient and with minimal post-operative pain. All patients received pain killers and laxatives and 3 days of oral antibiotics. No repeat admissions except on a patient who developed external abscess which was drained subsequently. One patient developed transient incontinence which settled in 3 weeks with sphincter physiotherapy. 9 out of 12 patients healed completely within 3 weeks. One recurrence in 6 months followup period.

DISCUSSION: The initial study describing the technique 3 was composed of 17 patients and primary cure rate was 94.4%; one patient underwent reoperation for the same technique LIFT, cured. There was description of incontinence in this study.

Huda E Ashok[6] reviewed the initial publication in order to establish more rigid inclusion criteria to identify patients who benefit from this operation for fistula repair by LIFT technique and achieved 100% results in fistula closure after the first procedure and no patient had incontinence.

Sileri et al[7] in prospective study of 18 patients achieved a cure rate of 83% with only 3 recurrences- the complementary treatment fistulotomy was in one patient, and two others required endorectal advancement flap - with subsequent complete healing of fistula.

Makhlouf and Korany[8] in a series of patients (25 men) with mean age of 36.5 years who underwent LIFT showed complete cure of 90%. One patient developed abscess 6 months after the initial procedure, three with recurrences. There were no cases of incontinence.

It is clear that LIFT has results that prove its effectiveness. The articles cited are consistent with this study regarding outcome which simulates to use LIFT procedures with highly success rates in selective fistula patients. Other complex fistulas and large volume of patients in multiple centres are to be studied.

CONCLUSION: This analysis indicates that the LIFT procedure is definitely effective for transsphincteric fistula patients with an overall fistula closure of 92.66% with low impact of sphincter damage and 8.66% of recurrence. This is a small group study with early results. This needs to be evaluated with a larger number of patients and should be followed up for more prolonged periods and analysed.

REFERENCES

1. Vergara - Fernandes O, Espino - Urbina LA. Ligation of intersphincteric fistula tract: what is the evidence in a review? World J Gastroenterol 2013;19(40):6805-6813.
2. Whiteford MH, Kilkenny J, Hyman N, et al. Practice parameters for the treatment of perianal abscess and fistula-in-ano (revised). Dis Colon Rectum 2005;48(7):1337-1342.
3. Huda T, Ashok M. Lift technique for fistula-in-ano with redefined criteria - a step towards better outcome. IOSR Journal 2013;11(1):61-63.
4. Meinero P, Mori L. Video-assisted anal fistula treatment (VAAFT): a novel sphincter-saving procedure for treating complex anal fistulas. Tech Coloproctol 2011;15(4):417-422.
5. Rojanasakul A, Pattanaarun J, Sahakitrungruang C, et al. Total anal sphincter saving technique for fistula-in-ano; the ligation of intersphincteric fistula tract. J Med Assoc Thai 2007;90(3):581-586.
6. Rojanasakul A. LIFT procedure: a simplified technique for fistula in ano. Tech Coloproctol 2009;13(3):237-240.
7. Sileri P, Franceschilli L, Angelucci GP, et al. Ligation of the intersphincteric fistula tract (LIFT) to treat anal fistula: early results from a prospective observational study. Tech Coloproctol 2011;15(4):413-416.
8. Makhlouf G, Korany M. Lift technique for fistula-in-ano. Egyptian Journal of Surgery 2013;32(1):32-36.