

EFFECTIVENESS OF THE LIGATION OF INTERSPHINCTERIC FISTULA TRACT IN THE TREATMENT OF HIGH LYING PERIANAL FISTULA

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ABSTRACT

Background: Intersphincteric fistula may be ligated during surgery of high lying perianal fistula. **Objective:** To evaluate the effectiveness of the Intersphincteric ligation technique of the fistulous tract in the treatment of high lying anal fistula. **Methodology:** Study Design. Quasi Experimental study. Study Setting: Surgical deptt- II BVH Bahawalpur. Sampling Technique: Non-probability purposive sampling. Duration: 1st February to 31st July 2016. A total of thirty patients were recruited for this study, of high lying perianal fistula, and transsphincteric variety. Diagnosis verified by EUA, fistulogram and by MRI. They were subjected to ligation of Intersphincteric fistula tract on elective operation list. All these patients were observed in ward meticulously for 5 days then discharged and follow up done on OPD basis for 3 month for recurrence of fistula and for development of complications like incontinence. The data was entered and analyzed by using SPSS version 20. **Results:** Twenty five patients were cured. Only 5 patients were declared of recurrence of fistula, all 5 patients were having abscess cavity and that's why fistula tract have not healed. No patient presented with incontinence. The effectiveness of LIFT procedure remained about 83% in this model. **Conclusion:** The Ligation of Intersphincteric Fistula Tract (LIFT) technique in mid-term evaluation is effective for the treatment of high lying anal fistula.

Key words: Anal fistula, Incontinence, Ligation.

INTRODUCTION

Anal fistula, is associated with significant morbidity and characterized by chronic purulent drainage or cyclic pain associated with acute relapse of the abscess and intermittent spontaneous decompression.¹ Among the current treatment options are: fistulotomy, fistulectomy, application of fibrin glue, anorectal advancement flap, but non of these options are free of complication specially in high lying transsphincteric fistula.^{2,3,4,5} After controlling the sepsis and treating the underlying abscesses and managing the active underlying disease there is need to treat the high lying fistulous tract that, is simple, cheap, single time with maximum patient improvement.^{6,7,8} Most of current options such as fistulotomy, fistulectomy, are not feasible sometimes and multiple redoing have to undertaken that may be associated with recurrent and incontinence.^{9,10}

Arun Rojanasakul et al,² developed the technique Ligation of the Intersphincteric Fistula Tract (LIFT). The central idea of this novel procedure was that the excision and ligation of Intersphincteric tract can occlude the entry of fecal particles in the fistula and, at the same time,

eliminate the Intersphincteric septic focus.^{12,13}

The treatment of anal fistula is mainly surgical, to eliminate the fistula, prevent recurrence and preserve anal continence.^{14,15,16} However, among the various alternatives for the treatment of anal fistulas, until the moment, none of them is considered as the technique of choice due to their recurrence rates and incontinence.^{18,19,20} 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, gain more space in the treatment of anal fistulas. The objective of this study was to present the outcome of intersphincteric fistula tract in the treatment of high lying fistulas and assess its effectiveness.

METHODOLOGY

This Quasi experimental study was conducted in General surgical department-II, Bahawal Victoria Hospital Bahawalpur Pakistan, from 1st February to 31st July 2016.

Sampling technique was non-probability purposive sampling. A detailed informed written consent for the operation was taken on the hospital treatment chart. Patients admitted through out patient department, male and female of any age group suffering from

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chronic perianal fistula with crypto glandular tract, simple or complex fistulous tract but having high lying tract according to park classification, transphincteric, suprasphincteric and extra sphincteric were included in this study with internal opening of the fistula above the dentate line. Patients presented with severe perianal sepsis and deep underlying abscess with active tuberculosis were not included in this study.

For patients selection examination in operation theater under anesthesia was performed and radiological study of fistulogram was also performed in every patient, in case of doubt help was taken from MRI. Data was noted regarding patients' demographics, indications for surgery, operation performed, final histological diagnosis and complications.

Thirty patients were included in this study fulfilling the criteria and triple regimen antibiotic coverage was given to every patient. Operation were performed in main operation theater on elective list.

Novel procedure, ligation of Intersphincteric fistulous tract done by consultant surgeon under general anesthesia or spinal anesthesia. Proctoscopy was performed before surgery, fistula tract identified and three step procedure performed; first fistulotomy of the tract that is external to the sphincteric mechanism of anal canal, second fistulectomy or coring out of the fistulous tract that through the sphincters and internally to the sphincters, third ligation of the tract in Intersphincteric region means obliteration of the tract so that there was be no more communication between fistulous tract and anal canal. The excised fistula tract was sent for Histopathology.

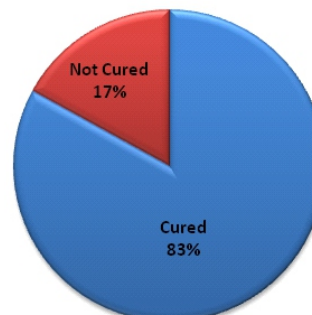
All patients were shifted back to ward after operation and intravenous antibiotic were continued during hospital stay for about 4-5 days and sitz bath were also started from next day, patients discharged and followed up on OPD basis for 3 month for recurrence and development of complication like incontinence. Data was entered and analyzed by using SPSS version 20.

RESULTS

A total of 30 patients were subjected to ligation of Intersphincteric fistula tract. During hospital stay of 5 days postoperatively all evolved satisfactorily without any need for early re-intervention. 3

month followup period, after the hospital discharge, 25 (83%) patients were found cured and only 5 (17%) patients were having of recurrence of fistula and hence declared not cured. No patient presented with incontinence. (Figure I)

Figure I: Cure among patients after surgery.



The patients having recurrence were readmitted in ward abscess drained in first sitting, Seton applied and planned for staged fistulectomy.

DISCUSSION

The abscesses and anal fistulas making majority of perianal suppuration. Anal fistula is the chronic phase of anorectal infection and is characterized by chronic purulent drainage or cyclic pain associated with acute relapse of the abscess.⁹ Most of patients with perianal abscess develop chronic or recurrent anal fistula. The operation for correction of anal fistula aims its cure with preservation of continence mechanism.

Measurement of anal fistulas is dependent on the location and complexity. During surgery, the goal is to protect the sphincter muscle and prevent recurrence. However, among the various alternatives for the treatment of anal fistulas none is considered as the technique of choice.^{12,9} The study describing the technique showed primary cure rate of 94.4%. There was no case of incontinence in that study.² Huda e Ashok followed more rigid inclusion criteria to identify patients who would benefit from the operation for fistula repair by LIFT technique and achieved 100% success in fistula closure after the first procedure.¹⁰

Sileri et al, in a prospective study of 18 patients achieved a cure rate of 83% with only three recurrences - the complementary treatment was fistulotomy in one patient and two other endorectal advancement - with subsequent complete healing of the fistula. There were also no cases of incontinence in that study.¹³ Makhlof and Korany 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 with abscess six months after the initial procedure and three with recurrence. There were no cases of incontinence.¹⁴

These studies showed that LIFT has results that prove its effectiveness,^{13,14} are consistent with current study regarding the positive outcome of the technique, which stimulates to use LIFT when needed. Perhaps the key to that cure rates reach 100% in the first intervention, is the strict selection of patients in whom the characteristics of the fistulas are favorable to the use of this technique.^{14,19,21} Due to the benefits mentioned, the LIFT technique has assumed a good surgical space and should remain with 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. The current study was not a randomized controlled trial comparing LIFT with other sphincter-preserving techniques. Further studies are needed — for instance comparing outcomes with the LIFT technique and the anal fistula plug and other techniques.

CONCLUSION

The Ligation of Intersphincteric Fistula Tract (LIFT) technique in mid-term evaluation is effective for the treatment of anal fistula, however there is a need for well-conducted randomized studies that compare various modifications in the preoperative assessment and the operative details and compare LIFT with other sphincter-preserving techniques.

Conflict of interest

The authors have declared no conflict of interest.

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