

Simple New Approach for Anorectal Fistula: Submucosal Ligation of Fistula Tract

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Abstract

Introduction: The care of patients with burns is complex, expensive, and tedious, months of hospitalization may be necessary during acute phase, and later on, many reconstructive surgical procedures are required. A study has been conducted to assess the efficacy of amniotic membrane as a temporary biological dressing and its feasibility for clinical application.

Materials and Methods: A total of 20 cases of superficial burns wounds were studied over 2-year study period with age range between 2 and 41 years and up to 35% of superficial burns area, including cause of burns may be flame burn, chemical burn or hot liquid burns and presented at hospital within 48 h.

Results: Flame burns exceeded in causing burns than hot liquids. By providing a cover, the membrane-like other biological dressing, protects the wound from the environment and reduces heat and fluid loss, relieves pain in partial thickness burns. In the majority of patients, the parts most commonly affected were abdomen, chest, and lower limbs. It was observed that partial thickness burns healed without any further treatment. The superficial partial thickness burns healed completely after the application of the membrane. Amniotic membrane is helpful to control of pain and fluid loss, control of bacterial growth and it is effective vapor and exudate barrier and also helpful to reduce the duration of hospitalization.

Conclusion: The use of an amniotic membrane as a biological dressing for thermal injury is simple, cheap, and found to be superior to allografts and xenografts. The membrane prevents fluid and heat loss from surface wounds and acts as a barrier against bacterial contamination thus aiding the healing process and reducing the morbidity. Another clinically significant and important property of the membrane is its ability to affect marked relief of pain.

Key words: Anorectal fistula, Perianal fistula, Submucosal ligation

INTRODUCTION

Anorectal fistula is very common perianal disease with many treatment options such as ligation of intersphincteric fistula tract (LIFT), video-assisted fistula treatment (VAFT), fistulotomy, fistulectomy, seton, and fibrin glue occlusion.^[1-4] LIFT is technically difficult with high recurrence rate about 40%.^[5] VAFT has a good result but not cost effective and not available at all place. Submucosal ligation of fistula tract (SLOFT) for anorectal fistula is new technique which is easy to learn and easy to perform with low cost and low complication rate.^[6]

METHODS

This is a prospective study conducted at NSCB Medical College, Jabalpur, between 2014 and 2017 after clearance of ethical committee and written informed consent. All type of anorectal fistula is included in the study except fistula because of malignancy and tuberculosis. After proper history and systemic examination, digital rectal examination and proctoscopy were done at Sims position to see internal opening. Type of fistula was defined according to the Parks classification. Fistulogram was done in each case; ultrasonography or magnetic resonance imaging was done in multiple fistula only. Enema was given at midnight. Single dose of 1 g of ceftriaxone was given at the time of induction. All surgery was performed under spinal anesthesia at lithotomy position.

Two-finger anal dilation was done with 2% of xylocaine Jelly. Speculum was introduced to see internal opening.

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Table 1: Type

Parameter	Sample size	Mean operative time (minutes)	Incontinence	Recurrence (percentage)
SLOFT (present study)	20	31	None	10.0
SLOFT (Pathak)	13	Not mentioned	None	None
LIFT (Rojanasakul <i>et al.</i>)	18	Not mentioned	None	5.6
LIFT (Shanwani <i>et al.</i>)	45	67.5	None	17.7
LIFT (Bleier <i>et al.</i>)	39	Not mentioned	None	10.2

SLOFT: Submucosal ligation of fistula tract, LIFT: Ligation of intersphincteric fistula tract

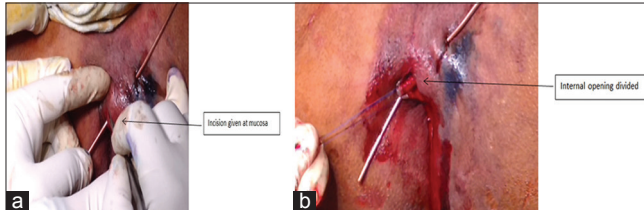


Figure 1: (a and b) Incision at mucosa

Three no feeding tube was inserted through external opening, and methylene blue was injected through feeding tube to see spillage of dye through internal opening. A pliable copper probe is inserted through external and internal opening. 2 mL (2%) of xylocaine with 1:200000 adrenaline injected at submucosa all around the tract. Incision is given at mucocutaneous junction near the tract [Figure 1a and b].

Tissue was dissected all around with artery forceps to reach the tract. Aneurysm needle was passed behind the tract and Vicryl 3-0 suture hooked around the tract, probe was withdrawn, and tract was ligated and divided near submucosa. Remaining tract was existed. Wound was clean with normal saline. Wound was left unclosed to heal with secondary intention. Patient was advised for sitz bath with lukewarm water, analgesic, stool softener, and oral antibiotic. Regular follow-up was done weekly for 1 month and on 2 weeks on the 2nd and 3rd months.

RESULT

A total of 20 patients were operated by SLOFT technique, 15 patients were male and 5 patients were female. Age was between 18 and 55 years. Most of the fistula were intersphincteric (66%), other was transsphincteric (26%), and suprasphincteric was 6.6%. Mean hospital stay was 48 h, and day to return to work was 5 days. Duration of surgery was 30 min. Mean follow-up was done on 1st week, 2nd week, 30th day, and up to 2nd and 3rd months. Two patients develop surgical site infection which was managed conservatively. There were no incontinence and

no anal stenosis. There was only one recurrence in this study. Cosmesis was good without scar [Table 1].

DISCUSSION

Other treatment options for anorectal fistula are LIFT, fistulotomy, VAFT, fistulectomy, and seton, plug.^[1] None of these techniques are remarked as ideal treatment with low recurrence rate, minimal incontinence, early recovery, and cost effective. LIFT is technically challenging approach with a high chance of sphincter damage and formation of intersphincteric abscess post-operatively which is difficult to treat. VAAFT has a good result but not cost effective and not available at all place. SLOFT is simple surgical technique which is easy to learn and easy to perform, with low recurrence rate, early recovery, no incontinence, and very cost effective.

REFERENCES

1. Meinero P, Mori L. Video-assisted anal fistula treatment (VAAFT): A novel procedure for treating complex anal fistula. *Tech Coloproctol* 2011;15:417-22.
2. Song KH. New technique for treating an anal fistula. *J Korean Soc Coloproctol* 2012;28:7-12.
3. Rojanasakul A. LIFT procedure: A simplified technique for fistulain-ano. *Tech Coloproctol* 2009;13:237-40.
4. Tacob TJ, Perakth B, Keighley MR. Surgical intervention for anorectal fistula. *Cochrane Database Syst Rev* 2010;CD006319;1508-30.
5. Fernandez OV, Urbina LA. Ligation of intersphincteric fistula tract: What is the evidence in a review? *World J Gastroenterol* 2013;19:6805-13.
6. Pathak DU. Submucosal Ligation of Fistula Tract (SLOFT) for Ano-rectal Fistula: An Effective and Easy Technique. Available from: <http://www.researchgate.net>. [Last accessed on 2018 Feb 15].

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