
Case Report

Fistula in Ano treated by Ligation of Intersphincteric Fistula Tract: A case report

V. V. Rajput¹, B. S. Warad², D. V. Kale³, S.P. Tated⁴ and B. S. Nagoba⁵
Professor & Head, Dept. of Surgery¹, Professor of Surgery², Professor of Surgery³, Junior
Resident in Surgery⁴, Assistant Dean (Research & Development)⁵
M. I. M. S. R. Medical College & Y. C. Rural Hospital, Latur, India.

Abstract

Perianal fistula is a very common disease seen in the general population. Generally, fistulectomy is an adequate surgical procedure for the treatment of a simple or low transsphincteric fistula. In the presence of a complicated transsphincteric or suprasphincteric fistula, application of advancement flaps, an anal plug and fibrin glue are the different options for the treatment. The main objective in different procedures is the treatment of the disease and the prevention of recurrences, and anal incontinence. Here, we present a case of fistula in ano treated by a Ligation of Intersphincteric Fistula Tract technique – a newer technique of treating fistula in ano.

Key words: Perianal fistula, fistulectomy, Ligation of Intersphincteric Fistula Tract technique

INTRODUCTION

Perianal fistula is commonly seen disease in the general population. Its rate varies from 5.6 to 12.3/100,000 [1-3]. This disease arises from an infectious process of the intersphincteric glands [1, 3]. Generally, fistulectomy is an adequate surgical procedure for the treatment of a simple or low transsphincteric fistula. In the presence of a complicated transsphincteric or suprasphincteric

fistula, application of advancement flaps, an anal plug, fibrin glue, ligation of the intersphincteric fistula tract (LIFT), radiofrequency ablation, a loose seton, etc. are the different treatment options available [4]. The main objective in these procedures is the treatment of the disease and the prevention of recurrences, and anal incontinence. The cutting seton technique, which has been widely used for years, is associated with a high rate of incontinence. Flatus incontinence (36%), semiformal (8.5%) and formed fecal incontinence (2.3%) after surgery have been reported [5]. In another study, the overall postoperative complication rate of 63%, with a recurrence rate of 6% has been reported [6]. The loose seton technique has become the preferred surgical procedure because of the high incontinence and recurrence rates seen after the cutting seton technique. As the fistulous tract is kept open in the loose seton technique, local infection can be controlled more readily and also the formation of a more complicated fistula can be prevented. In addition, the anal sphincter function can be better preserved. Here, we present a case of fistula in ano treated by a Ligation of Intersphincteric Fistula

Tract technique – a newer technique of treating fistula in ano.

patient was examined at first, second and fourth postoperative weeks. No complications, including local sepsis, hemorrhage, ectropion and intractable pain, were noted during the peri- and the postoperative follow-up periods. No recurrence was observed and no further surgical intervention was required during follow-up.

The Case Report

A 45- year-male- old patient presented with discharge in perianal region since one month. On local examination a 3 0 clock discharging opening was found. On per rectal examination no internal opening was palpable. Pelvic magnetic resonance imaging (MRI) was used to localize the internal orifice before surgery; then, the two-stage procedure was performed. In the first stage, a loose seton was placed in the fistula tract. However, the internal and the external orifices were closed with advancement flaps in the second stage, which was performed three months after the first stage. Initially, methylene-blue dye was used to delineate the total track of fistula from the external orifice to internal orifice; then, a probe was used to trace the tract. Following the injection of methylene blue, a fistulectomy was performed by excising the tract in the gluteal region up to point where the external

anal sphincter was located, sparing the sphincter. A loose seton was used with an 8-Fr CH Nelaton silastic tube, encircling both the external and the internal anal sphincters. One end of the silastic tube was introduced into the other end, and the two ends were tied with each other to prevent skin irritation during the postoperative period. This modified seton placement enabled the seton to move freely by 360° within the tract. Three months after the seton placement, the second stage of the procedure was performed. During this, the previously placed seton was removed and a mucosal advancement flap procedure and a house flap (modified V-Y advancement flap) procedure were performed in order to close the internal and the external orifices of the fistula tract, respectively. The two free ends of the flaps were connected to each other at the dentate line with absorbable 3/0 intermittent Vicryl sutures). The patients was discharged on the Seventh postoperative day with an advise to take a sitz-bath once a day for a week after bowel movements. During follow-up, patient was examined at first, second and fourth postoperative weeks. No complications, including local sepsis, hemorrhage, ectropion and intractable pain, were noted during the peri- and the postoperative follow-up periods. No recurrence was observed and no further

surgical intervention was required during follow-up.

DISCUSSION

A perianal fistula is the problematic disease in surgery. Although a number of surgical techniques are available to treat this condition, no one is ideal for the treatment of this disease. In recent times, the LIFT has become a popular procedure [7, 8]; however, the postoperative results after this procedure have not been convincing. The success rate after the first LIFT procedure has been reported to be 67%, and after a repeated LIFT has been reported to be 90% [9]. In several studies, the advancement flap technique has been compared with other techniques. The mucosal advancement flap is a technique that can be used by itself in the treatment of the perianal fistula and has a success rate between 0% and 83% [10,11, 12]. In addition to these techniques, the loose seton technique is another option for surgical repair. An incontinence rate of 5% after loose seton placement has been [13]. In other studies, the incontinence rate was reported to be 0% to 8%, and only minor complaints were observed in 60% of the patients [4, 9].

There are two important problems in the surgical treatment of an anal fistula - recurrence and incontinence, which affect the surgical outcome. The success rate after loose

seton placement has been reported to be between 44%-78% [4, 15]. Success rates, of course, depend on the location of the fistula and they have been reported to be 66% and 88% in the presence of anterior and posterior fistulae, respectively [14]. When compared with the LIFT procedure after seton placement, application of an advancement flap has been reported to contribute to a higher success rate (93.5% vs. 62.5%) [15].

The results show that the two-stage seton and advancement flap technique is very efficient and seems to be a good alternative for the treatment of a transsphincteric anal fistula. Further comparative studies with larger series should be done in order to support our findings.

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Address for correspondence

Dr. B. S. Nagoba

Assistant Dean (Research & Development),
Maharashtra Institute of Medical Sciences & Research,
Latur-413 531, M.S., India
Email: drbsnagoba@yahoo.com, bsnagoba@gmail.com
Mobile No. +919423075786/ +917588237531
Fax : +912382227246
Tel: +912382227424

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