



Case Report

IFTAK technique: An advanced Ksharsutra technique for management of fistula in ano

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ABSTRACT

Fistula in ano is most notorious disease among all the ano-rectal disorders since antiquity. Over the past few decades, various techniques are being evaluated in terms to prevent its recurrence and complications, but despite more than two millennia of efforts, fistula in ano still remains a perplexing surgical disease. The sign and symptoms of fistula in ano resembles with *Bhagandara* described in *Ayurveda* classics. For the management of this painful disease many treatment modalities are enumerated in *Ayurveda* classics and *Ksharsutra* therapy is one among them which is proved to be gold standard. Though *Ksharsutra* therapy is big revolution in the field of fistula in ano, but it has some disadvantages like it is time consuming process, severe post-procedural pain, big scar mark. So, in present era IFTAK is emerging as an advanced innovative technique for the management of fistula in ano along with betterment in the consequences of conventional method of *Ksharsutra* therapy. In the present case report, IFTAK (Interception of Fistulous tract and application of Ksharsutra) technique is used in trans sphincteric fistula in ano which showed a great potential in management by minimizing the duration of treatment, mild post procedural pain and minimum scar mark.

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1. Introduction

Fistula in ano is an abnormal communication between two epithelial surfaces and the track is usually lined by unhealthy granulation tissues. The main cause known for fistula in ano is crypto glandular infection of anal crypts [1]. Mostly perianal abscesses and fistula in ano indicates the acute and chronic condition of same disease process of infective origin. From the anal abscess the incidence of fistula ranges from 26 to 38%. Prevalence of fistula in ano is still an uncertain thing. A study showed that the prevalence rate of fistula in ano is 8.6 cases per 100,000 populations. This disease in four times more common in males as compared to females and the mean age of affected population is about 38.3 years [2]. Though the disease is not life threatening but it produces severe inconvenience in routine life due to discomfort and pain.

In *Ayurveda* classics, according to similar clinical features the disease *Bhagandara* can be correlated with fistula in ano. *Acharya*

Sushruta counted *Bhagander* among the eight diseases which are difficult to cure [3]. At first it presents as *Pidika* around the *Guda* and when it bursts out, it is called *Bhagandara* [4]. There are more than hundred treatment modalities available for the management of fistula in ano. Modern surgical management includes fistulotomy, fistulectomy, seton placing, ligation of inter-sphincteric fistula tract (LIFT), fibrin glues, advancement flaps, and expanded adipose derived stem cells (ASCs) [5]. *Acharya Sushruta* has also described different therapeutic measures for the management *Bhagandara* as in terms of various oral medications, local applications, surgical procedures and para-surgical intervention. Presently *Ksharsutra* therapy is found most approaching and attractive treatment modality among para-surgical procedures for fistula in ano [6]. In *Ksharsutra* various herbal drugs and caustic material obtained from ash of herbal plants are coated over barbour's linen thread. It is standard treatment modality found in surgical practice for the management of fistula in ano as the therapy has revolutionized the treatment of fistula in ano in terms of re-occurrence and incontinence [7]. But with all these benefits, still there are some consequences suffered by practitioners while practicing *Ksharsutra* therapy in relation to patients i.e. it causes discomfort, post

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procedural pain, long anxiety period, number of hospital visits and longer duration of treatment, big post-operative scar etc. [8, 9, 10]. According to park's concept, 90% of fistula in ano caused by cryptoglandular infection as the root cause of infection is crypts which are located in intersphincteric area. Therefore, destroying the infected crypt may cure the fistula in ano and rest of track heal by itself. IFTAK (Interception of Fistulous tract with application of *Ksharsutra*) is a novel advanced *ksharasutra* technique based on this theory thus making it more convenient to patient as well as to exclude the drawbacks of conventional method. So cases of fistula operated by this technique may yield good encouraging results. IFTAK technique was planned in this case and was found very effective as it reduced anxiety period, minimized duration of treatment and painful sittings of *Ksharsutra* placement with minimal post-operative scar mark.

2. Presenting complaints and medical history

A 25 year old male normotensive, non-diabetic patient came to Shalya OPD of All India Institute of Ayurveda, New Delhi, with complaints of intermittent pus discharge from perianal region along with mild pain and itching since one year. He had also discomfort in sitting position. Patient had no other major systemic illness. Patient consulted various doctors but didn't got satisfactory result.

3. Clinical findings

On examination perianal skin was normal an external opening was present at 7'o clock approximately 4 cm away from anal verge (Fig. 1). On digital rectal examination, sphincter tone was normal, tender dimpling noted at 6'o clock below the dentate line. Rest of the digital rectal examination was within the normal limits. All the laboratory investigations were found within normal limit.

4. Treatment

After obtaining informed consent, patient was placed in lithotomy position. Under local anaesthesia, probing was done to assess the fistulous tract. A small vertical incision was made at perianal region at 6'o clock approx. 1.0 cm away from anal verge and interception of fistulous tract was done. Then normal saline was pushed from external opening and it came out from the intercepted area to confirm the accuracy of IFTAK. Metallic probe was introduced through the window from 6'o clock and taken out from internal opening and *Ksharsutra* was placed in the tract (Figs. 2 and 3), antiseptic dressing and packing done with *jatyadi taila*. Patient was

advised for regular hot sitz bath from the next day and dressing with *Jatyadi taila*. Patient was prescribed with *Triphala Guggulu* 2 tab TDS after food, Tab. Septilin 2 tab TDS after food, *Triphala Churna* 5 gm HS after food, *Jatyadi taila* for local application.

5. Follow up and outcomes

Weekly follow up advised for *Ksharsutra* changing. *Ksharsutra* was changed once after first *Ksharsutra* placed. The pus discharge was fluent in first week from the artificially made window, gradually reduced and completely disappeared after two week. Pain was also moderate in first week and later on gradually relieved. The discharge from the external opening was also reduced gradually in 3–4 days and totally dried up in one week. Cut through (Fig. 3) was done when discharge completely diminished from the artificial made window i.e. after two weeks of first *Ksharsutra* placed and complete healing was achieved in 10 days after cut through. Patient was advised for application of *Jatyadi taila*. The fistulous tract was cut through and healed simultaneously by 4th week with minimal scar (Fig. 4). There was no complication seen during and after treatment and patient got free from all the symptoms. After 4 months of follow up, no recurrence is noted, patient was cured completely (Fig. 5).

6. Discussion

Ksharasuta therapy is the most successful treatment modality for fistula in ano. *Ksharsutra* therapy has high success rate [11] and least recurrence rate (3.33%) [12]. It is very easy day care and cost effective treatment with minimum rate of complications as compared to conventional treatment modalities which requires hospitalization, regional or general anaesthesia, and regular post-operative care. These surgical treatments are associated with a significant risk of recurrence (0.7–26.5%) and high risk of impaired continence (5–40%) [13]. Though the *Ksharsutra* therapy is choice of treatment for fistula in ano with number of benefits but it has few disadvantages such as discomfort, post procedural pain, number of hospital visits, longer duration of treatment and big post-operative scar which lead to low compliance and low acceptability by many patients. IFTAK (Interception of Fistulous tract and application of *Ksharsutra*) technique seems to overcome the limitations and consequences of conventional method. Duration of therapy was less by shortening the length of the track and taking care of crypto glandular infection where there was no need to treat residual curved track. Pain was significantly reduced because of less exposure of tissues after interception which is from internal opening where as in conventional method whole track was



Fig. 1. Before treatment.



Fig. 2. During Probing.



Fig. 3. Ksharsutra application.



Fig. 4. After cut through.



Fig. 5. Follow up after 4 Month.

exposed along the axis during the *Ksharsutra* change which increases the pain and burning sensation because of more tissue exposure.

In this case study the external opening was around 4 cm away from the anal verge at 7'o clock position and Interception was done at 6'o clock position around 1.0 cm away from anal verge,

thereby reducing the length of the tract. Therefore, by IFTAK technique the time duration for complete healing was reduced and pain was also significantly reduced with minimum scar mark. Patient was completely cured within a month and recurrence had not occurred up to four months of follow up. Tablet Septilin and Tab. *Triphalaguggulu* were used to counter inflammation, pain and to prevent infection along with IFTAK technique. *Triphala guggulu* has proven antimicrobial agent [14]. Septilin has reported significant anti-inflammatory and analgesics and immunomodulatory effects in various studies [15]. Thus, it may be useful in prevention of infection and promote wound healing also *Triphala* has antibacterial action against a variety of Gram-positive and Gram-negative bacteria and immunomodulatory effect [16]. and according to *Ayurveda*, *Triphala* has *Anulomana* action, which regulates *Apana Vata* and facilitates easy bowel evacuation [16]. Local application of *Jatyaditaila* reported to significantly increase protein, hydroxyproline and hexosamine contents in the granulation tissue and helps in fast healing [17]. So, IFTAK is advanced convenient technique in the field of fistula which has great innovation with lot of benefits.

7. Conclusion

Hence the study concluded that, IFTAK is a safe, effective and advanced technique which minimizes the post-operative time along with betterment in mild post procedural pain and minimum scar mark.

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Conflict of interest

None.

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