

CASE STUDY

Integrating Ayurvedic Principles in Modern Proctology: The Case of Ksharasutra Therapy

Kamal Patel, Hemant Tohikhane, Harish Daga and Milan Patel

Department of Shalya Tantra, Parul Institute of Ayurved, Vadodara, Gujarat, India

Corresponding Author: Kamal Patel

Email: kamalpatel11101998@gmail.com

ABSTRACT

Fistula-in-ano is a chronic anorectal condition characterized by an abnormal tract connecting the anorectal lumen to the perianal skin, typically resulting from infected anal glands. Its complex nature and high recurrence rate present significant treatment challenges. While conventional surgical interventions such as fistulotomy and fistulectomy are widely used, they are associated with risks of complications. Ayurveda offers an alternative treatment approach through Ksharasutra therapy, a minimally invasive para-surgical procedure. This case study presents the management of a 33-year-old male patient with a seven-month history of Fistula-in-ano, experiencing intermittent pus discharge and mild perianal pain. Following unsuccessful antibiotic therapy, Ksharasutra treatment was performed under spinal anaesthesia. The fistulous tract was identified, and a medicated Ksharasutra was applied and replaced weekly, leading to complete excision over 13 sittings. The patient exhibited full recovery without complications, and no recurrence was observed during follow-up. This case highlights the efficacy, safety, and cost-effectiveness of Ksharasutra therapy as a viable alternative to conventional surgical methods. Its combined mechanical and chemical actions enable controlled excision, reduced complications, and enhanced healing, reinforcing its significance in Ayurvedic anorectal disease management.

Keywords: Bhagandar, Fistula-in-ano, Ksharasutra, Snuhi Ksheera, Haridra Churna, Apamarga Kshara.

Received 24.12.2025

Revised 01.02.2026

Accepted 21.02.2026

How to cite this article:

Kamal Patel, Hemant Tohikhane, Harish Daga and Milan Patel. Integrating Ayurvedic Principles in Modern Proctology: The Case of Ksharasutra Therapy. Adv. Biores. Vol 17 [3] March 2026. 195-201

INTRODUCTION

A fistula-in-ano is a persistent, irregular channel lined with granulation tissue that connects the anorectal lumen's internal opening to the perineum or nearby structures. Most anal fistulas develop due to an infection in the anal glands, leading to abscess formation within the intersphincteric plane. From there, the infection can spread in multiple directions, creating openings internally, externally, or remaining blind [1]. Due to the potential for sepsis to extend into deeper or multiple tissue planes and the increased involvement of sphincter muscles, anal fistulas are often complex and present significant treatment challenges [2]. In Ayurveda, *Bhagandar* (Fistula-in-Ano) is a disease that affects the anorectal region. It is extensively described in classical texts, with Acharya Sushruta (1500-1000 B.C.), the father of Indian surgery, being the first to emphasize its significance [3]. He classified *Bhagandar* as one of the *Mahagada* (major diseases) and provided a comprehensive explanation of its causes (*Nidan*), pathogenesis (*Samprapti*), types, symptoms (*Lakshanas*), complications (*Upadrava*), and treatment (*Chikitsa*) [4]. *Ksharakarma* (alkaline therapy), *Jalaukavacharana* (leech therapy), and *Agnikarma* (heat cauterization) are just a few of the *Shastra Karma* (surgical procedures) and *Anushastra Karma* (para-surgical techniques) that Sushruta thoroughly explained. Because it can balance, excise, incise, and scrape the three *Doshas*, *Kshara* is regarded as a crucial para-surgical technique. Due to its low recurrence rate and ease of administration, *Kshara* in the form of *Ksharasutra* has been widely accepted for the treatment of anorectal illnesses. *Ksharasutra* facilitates cutting and healing by combining chemical and mechanical effects [5]. While *Chakradatta* mentioned a medicinal thread coated with Snuhi and Haridra powder for managing *Arsha* (piles) and *Bhagandar* (fistula-in-ano), Sushruta expressly cited *Ksharasutra* for treating

Nadivrana. Eleven *Snuhi Ksheera* coatings are used in the traditional *Ksharasutra* preparation process. These are followed by seven *Snuhi Ksheera* coatings combined with *Apamarga Kshara* and three *Snuhi Ksheera* coatings combined with *Haridra Churna*. Because of its cutting, curing, and mending qualities as well as its capacity to manage infections, this medicated thread works well for treating fistula-in-ano [6]. A case report of a patient with fistula-in-ano who was effectively treated with *Ksharasutra* and who showed no signs of complications or recurrence throughout the follow-up period is presented in this study.

CASE REPORT

A 33-year-old male patient with chief complaints of pus discharge with mild pain at perianal region since last 7 months, He took various medication at rural centre but didn't cure, so he arrived at OPD No. 106 Department of Shalya Tantra, Parul Ayurved Hospital, Vadodara for further Treatment.

PERSONAL HISTORY:

Table no: i

CHIEF COMPLAINTS AND DURATION:

The patient has been complaining of mild perianal discomfort and pus discharge from anal region for Last seven months.

H/O PRESENT ILLNESS:

Prior to seven months, the patient seemed to be in good health. Then, for the previous seven months, he had been experiencing sporadic discharge in the perianal area. Along with persistent pus discharge for five months, he also reported slight soreness and discomfort when sitting. He had taken antibiotics and analgesics for it, but to no avail. He therefore came to the OPD of Shalya Tantra, Parul Institute of Ayurveda, Vadodara for treatment.

HISTORY OF PAST ILLNESS:

No prior hospitalization or any serious illness.

General Examination:

1. **G.C**-Modest Afebrile
2. **CVS**- S1 S2 Normal.
3. **Pulse**- 79/min
4. **BP**-130/84 mm Hg
5. **Height** - 154 cm
6. **Weight** -66 kg
7. **Temp.**-Afebrile
8. **RS** -B/L Chest clears.
9. **Pallor/ Icterus / Clubbing / Edema / Lymphadenopathy** – Absent
10. **Tongue** – Uncoated
11. **Digestive System** - Appetite- Normal, Bowel- Constipated.
12. **Uro-genital System**- NAD

Asthavidha Pariksha:

1. **Nadi** = 79/min.
2. **Mala** = 1-2 times/day
3. **Mutra** = 5-6 Times/day
4. **Jihva** = Alipta
5. **Shabda** = Normal.
6. **Sparsa**= Anushana Sheet
7. **Druka** = Normal
8. **Akruti** = Madhyama.

INVESTIGATIONS:

CBC, Urine Routine & Micro, CT, BT, RBS was normal and HIV I & II, VDRL and HBsAg were non-reactive.

Local Examination:

Local perianal examination, in lithotomy position of patient.....

Digital Rectal Examination:

Palpate along the 10 to 7 o'clock position to feel any thickened cord-like tract.

Proctoscopy Examination:

Direct visualization of the mucosal internal opening at 12 o'clock position. Presence of pus, granulation tissue noted.

MRI Report:**Image no: 1 & 2****KSHARASUTRA APPLICATION:****Pre-operative:**

The patient was given no oral instructions for six hours prior to surgery. Written informed consent was obtained. A local portion of the patient was ready. In the morning before the procedure, a PC enema was administered. Injection T.T. 0.5 cc IM and injection sensitivity test. SC was done with 0.2% xylocaine.

Operative procedure:

Patient shifted in OT room with stable vitals. Prone position given on operation theatre table. Spinal anaesthesia given under AAP; anaesthetic effect was achieved. The patient was placed on the operating table in the lithotomy position. Draping and painting are finished. A very complicated fistula which was blind externally. Make 2 window externally for proper drainage. *Ksharasutra* threads were applied there. Bandaging was done while maintaining complete haemostasis.

Post-operative:

After stabilizing vitals, the patient was moved to the recovery room. NBM up until further notice. Vital signs are monitored every two hours. Put your head down for a full day. It takes seven days for the *Ksharasutra* thread to alter.

Order:

1. Inj. Xone 1 gm IV BD for 3 days
2. Inj. Pan 40 mg IV BD for 3 days
3. Inj. Emset 4 mg IV BD for 3 days
4. Inj. Dynapar 75 mg SOS
5. Tab. Zerodol SP 1 BD A/F
6. Syp. Duphalac 30 ml at bed time
7. From next day, Sitz bath with PWK 2 times per day.

During hospitalization, the patient was instructed to consume khichdi and eat a light diet. Additionally, it was suggested that he return to his regular daily activities. The patient was hospitalized for seven days before the next *Ksharasutra* was replaced.

After 3 Days Medication:

1. Tab. Zi-fi 325 mg 1 BD A/F for 5 days
2. Tab. Pan D 1 BD A/F for 5 days
3. Tab. Zerodol SP 1 BD A/F SOS
4. Syp. Duphalac 30 ml at bed time
5. *Triphala Guggulu* 2 BD A/F with w.w.
6. *Gandhak Rasayan* 2 BD A/F with w.w.
7. Sitz bath with PWK 2 times per day

FOLLOW UP

Following the first *Ksharasutra* change, the patient was released from the hospital and instructed to have a new *Ksharasutra* every seven days until the tract was cut. After being released from the hospital, the patient was permitted to resume his regular tasks. The tract was completely severed after 13 sittings, and healing occurred at the same time. There were no indications of a recurrence.

| | | |
|---------|-------------------|------------|
| Sr. No. | | |
| 1 | Name | XYZ |
| 2 | Age | 33 years |
| 3 | Gender | Male |
| 4 | Marital States | Married |
| 5 | Occupation | Tailor |
| 6 | Date of Admission | 14/09/2024 |

Table no:1 - Personal History

MRI OF ANO-RECTAL REGION

High resolution MRI of ano-rectal region was performed on a **3.0 Tesla MR Scanner, Siemens Vida**. Following imaging sequences were obtained:

Axial: T2 turbo-spin-echo (TSE), T1 TSE fs, STIR

Coronal: T2 TSE, STIR

Sagittal: T2 TSE

FINDINGS

FISTULA TRACT (Course, External opening, Internal opening, Signal intensity)

- A complex inter-sphincteric and trans-sphincteric fistula noted.
- The two tracts runs in inter-sphincteric space (for length of 18.6 mm from 10 o'clock to 7 o'clock position) and forms a single track.
- This demonstrates breaks in internal sphincter at 9 o'clock position and runs intramuscularly anteriorly and finally demonstrates mucosal opening at 12 o'clock position ~ 22 mm above the anal verge.
- The posterior ramus crossing the external sphincter at 10 o'clock position and opens blindly in right pubococcygeus muscle just below the levator ani.
- The anterior ramus of fistula causing posteriorly and inferiorly and forms small collection of 12 x 3 mm and opens blindly into the intersphincteric space.

PUBO- RECTALIS: Normal.

INTERNAL ANAL SPHINCTER: Normal.

EXTERNAL ANAL SPHINCTER: Normal.

PROSTATE: Normal.

SEMINAL VESICLES: Normal.

Page 1 of 2

Image no: 1 - MRI Report

BLADDER, URETHRA: Normal.
RECTUM: Normal.
FREE FLUID: Normal.
VISUALIZED BONES AND JOINTS: Normal.

IMPRESSION: A complex inter-sphincteric and trans-sphincteric fistula with small inter-sphincteric collection and external and internal opening as above.

Adv: Clinical Correlation

----- End of report -----

Page 2 of 2

Image no: 2 - MRI Report



Image no: 3 - Probing of Fistulous Track



Image no: 4 - Ksharasutra Thread tied to the Tracks

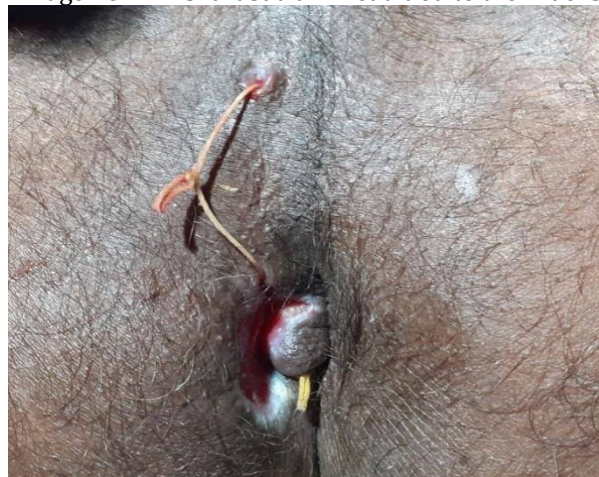


Image: 5 - Cut of the track by Ksharasutra



Image: 6 - One Thread cut out from the track by itself and show healing of the track



Image: 7 - Complete Healing of the track by Ksharasutra

DISCUSSION

Fistula-in-ano is a complex anorectal condition with a high recurrence rate and the involvement of multiple tissue planes, making its management particularly challenging. While conventional surgical treatments such as fistulotomy and fistulectomy are effective, they are often associated with complications, including incontinence, delayed healing, and postoperative risks. This necessitates the exploration of alternative treatment approaches that provide effective outcomes while minimizing adverse effects. *Ksharasutra* therapy, an Ayurvedic para-surgical technique, has emerged as a promising alternative due to its combined mechanical and chemical cauterization effects. The medicated thread used in this therapy is infused with *Snuhi Ksheera* (*Euphorbia neriifolia* latex), *Apamarga Kshara* (*Achyranthes aspera* alkali), and *Haridra Churna* (*Curcuma longa* powder), offering antimicrobial, anti-inflammatory, and wound-healing benefits. Its gradual excision and healing process allow for controlled tissue removal while preserving sphincter function, making it particularly advantageous for managing complex and high anal fistulas. This study highlights the increasing acceptance of Ayurvedic approaches in the treatment of anorectal disorders. The low recurrence rate, minimal postoperative complications, and cost-effectiveness of *Ksharasutra* therapy underscore its potential as a viable alternative to conventional surgical methods. Further clinical research and comparative studies with modern treatments are essential to establish *Ksharasutra* as a standardized procedure in proctology, promoting its integration into mainstream healthcare.

CONCLUSION

This case demonstrates *Ksharasutra* therapy as a safe, effective, and minimally encroaching method for treating fistula-in-ano. Its dual mechanical and chemical actions enable controlled excision, facilitate healing, and provide infection control, significantly reducing the risk of recurrence. The findings highlight its potential as a cost-effective alternative to conventional surgical interventions, with a lower incidence of complications such as incontinence. Further research and clinical trials are necessary to establish *Ksharasutra* as a standardized treatment in modern proctology, reinforcing the relevance of integrating Ayurvedic principles into contemporary medical practice.

Source of support

Parul Ayurveda Hospital, Parul institute of Ayurveda, Parul University, limda Vadodara, Gujarat.

Conflict of interest: There are no conflicts of interest

REFERENCES

1. Despande P.J, Pathak S.N, (1973). The Treatment of Fistula-in-Ano with Ksharasutra Treatment. A Review and Follow-Up of 200 Cases. PubMed Central.
2. Margaret Farquharson, James Hollingshead, Brendan Moran. (2014). Farquharson's Textbook of Operative General Surgery (9th edn) Chapter 24. CRC Press.pp435
3. Patel, M., Daga, H., & Paliwal, H. S. (2023). A Case Study of Yuvanpidika (Acne Vulgaris) Treated by Jalaukavacharan. Tuijin Jishu/Journal of Propulsion Technology, 44(3), 130-136.
4. Sushruta Samhita; Dalhana and Sri Gayadas commentary; By Dr. Keval Krushna Thakara; Chowkhambha Auriantaliya Prakaashana Varanasi 1st edition 2014; Reprint 2016; Part 2; Chikitsasthana 17.
5. D Toshikhane, D. H., Thakor, d. N. M., & Daga, d. H. (2022). Ksharsutra - ayurvedic scalpel of proctologist for fistula in ano. Book rivers.
6. Chakrapaani, Chakradatta, Hindi commentary by Ravidutta Shastry, Chaukhambha Surabharati prakashan, Varanasi, Reprint 2006, Arsha Chikitsaa 29.

Copyright: © 2026 Author. This is an open access article distributed under the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.