GS AYURVEDA MEDICAL COLLEGE & HOSPITAL
KNOWLEDGE • RESEARCH • HEALTHCARE
nurturing health building scholars

GS – JOURNAL OF INTEGRATIVE MEDICINE

CASE STUDY

PARTIAL FISTULECTOMY WITH *KSHARASUTRA* LIGATION IN THE MANAGEMENT OF BHAGANDARA (TRANS SPHINCTERIC FISTULA-IN-ANO) -A CASE REPORT

Dr. Hitesh Dagar[1], Dr. Favesh Mathnia[2]

1. Assistant Professor, Dept. of Shalya Tantra, G S Ayurveda Medical College and Hospital, Hapur,UP.
2. Assistant Professor, Dept. of Shalya Tantra, G S Ayurveda Medical College and Hospital, Hapur, UP.

ABSTRACT

Ksharasutra is a special medicinal thread used in Ayurveda to treat anal fistulas (a small tunnel-like infection near the anus). In this case, a patient with a low lying trans-sphinter fistula-in-ano was treated with a combination of partial fistulectomy and *Ksharasutra* therapy. The surgery removed part of the infected tissue, and the remaining fistula was treated by gradually applying a herbal thread made of ingredients such as *Apamarga Kshara*, *snoohi ksheer*, and turmeric. The thread was replaced weekly using a special technique and the cutting rate was recorded. The patient's wound was dressed daily with *jatyadi taila*. Throughout the treatment, the patient continued daily activities without any issues. After one months, with regular thread changes (eight times in total), the fistula was completely cut through and healed naturally without complications. The case demonstrated that using *Ksharasutra* along with partial surgery helps in faster healing than just applying the thread without surgery.

Keywords: Anal fistula, *Ayurveda, Ksharasutra*, Partial fistulectomy.

INTRODUCTION

In *Ayurveda*, *Bhagandara* (fistula-in-ano) is classified among the eight major diseases (*Ashtomahagada*) due to its challenging nature.[1] Anal fistula is a condition that arises after an infection in the rectal area, leading to symptoms such as pain, discharge, itching, and social discomfort.[2]

Surgical treatments like fistulectomy and newer techniques such as fibrin glue, fistula plugs, Video-Assisted Anal Fistula Treatment (VAAFT), and Ligation of the Inter-Sphincteric Fistula Tract (LIFT) have been developed, but they come with limitations.[3] Surgery for fistulas often raises concerns about recurrence and potential complications, including bowel and bladder incontinence.[4]

Historically, *Sushruta*, regarded as the father of surgery, described the use of *Kshara* (alkaline ash) in the treatment of *Bhagandara*.[5] Later, *Chakrapani* and *Bhavamishra* elaborated on the preparation and application of *Ksharasutra* for managing this condition.[6,7]

This study presents the case of a patient with a low anal fistula that had both external and internal openings. The condition was treated using *Ksharasutra* therapy, following the guidelines of the *Ayurvedic* Pharmacopoeia of India (API).[8] In which case the conventional *Ksharasutra* (prepared using latex from Euphorbia neriifolia) was substituted with a *guggulu-based* formulation (*Commiphora mukul*), while maintaining the standard procedural approach. The treatment was successful, and the patient recovered without complications.

CASE HISTORY

A 26 years old male patient visited the Shalya Tantra OPD of GS Ayurveda Medical College and Hospital, Hapur, UP with the chief complaints of pain and pus discharge per anus for 5 months along with a history of hypothyroidism for 1 year; he also had a surgical history of ASD closure 1 year back. The patient was habituated to consume n non-vegetarian diet and oily food. The patient was in the medical profession, and when he was on duty symptoms were aggravated and he had to take some allopathic medicine to get relief.

One external opening at the 10 o'clock position, just below the scrotum, was observed during perineal examination in the lithotomy position. After probing from the external opening, a tract was revealed, which seemed to be connected to the internal opening at the 12 o' clock position. It was confirmed by transrectal ultrasound (TRUS) and a 6 cm long linear nonbranching fistulous tract was delineated in the right perianal region with an external opening at the 10 0' clock position in the skin and an internal opening at the 12 o' clock position just proximal to the anal verge.

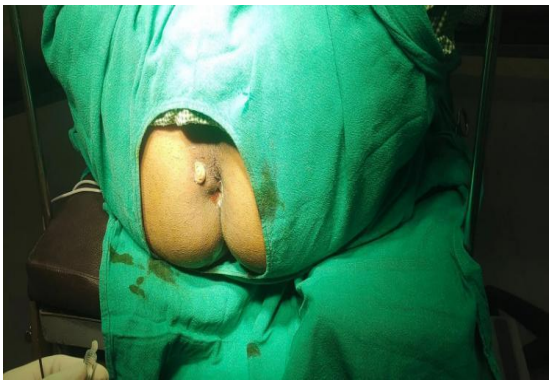
Routine blood and urine examination were done within normal range. The patient had no history of surgery or other illnesses. Hence, the patient was diagnosed with *Bhagandara* (anterior low anal trans-sphinter fistula-in-ano), and was admitted to the Shalya male ward for further management.

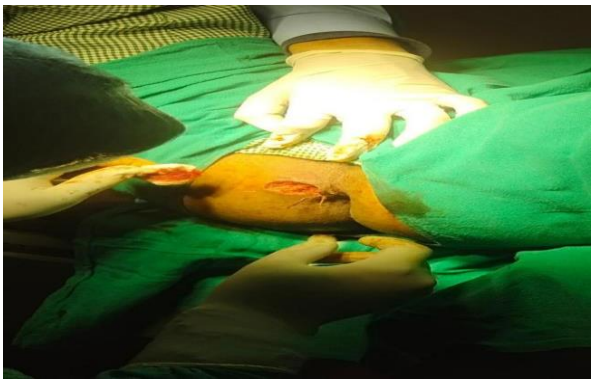
PRE-OPERATIVE

Written informed consent was obtained from the patient. The perianal part was prepared by performing the necessary shaving. Proctolysis Enema was given in early morning before operation. Inj T.T. 0.5cc IM and sensitivity test for inj. Xylocaine was intradermally administered.

Operative procedure: The patient was placed in the lithotomy position on the operating table. The operating part was paint with Betadine solution and draped with a sterile cut sheet.local anesthesia was infiltrated at operationg part. The effect of anesthesia was evaluated using forceps.

After anesthesia was achieved, infiltration was performed with H2O2 through an external opening. Probing was performed through the external opening at the 10 o'clock position, revealing the internal opening at the 12 o'clock position. The fistulous tract was excised from the external opening up to the internal anal sphincter using diathermy cautery. A *Ksharsutra* was then applied to the remaining portion of the tract. Heamostasis achieved. After achieving hemostasis, a betadine-soaked pack was placed in the anal canal. The patient was shifted to the postoperative room with stable vitals.





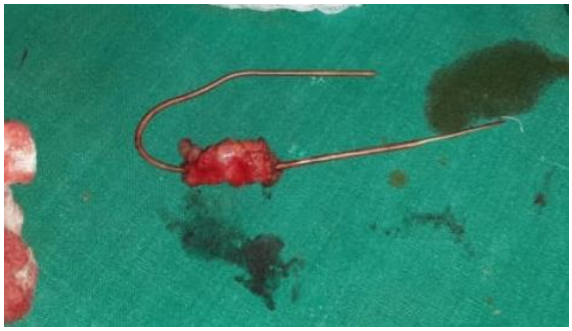


Fig. 01: Pre and

post operative stage.

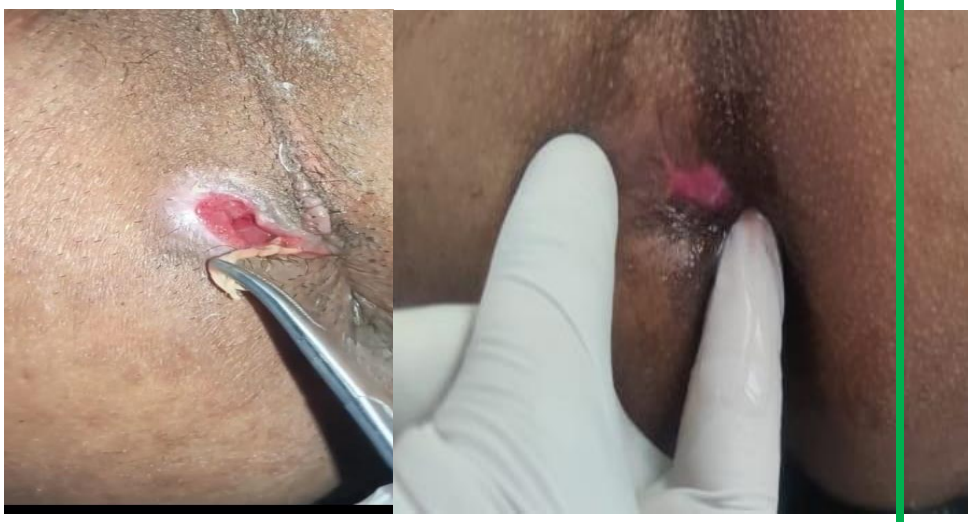


Fig 02: *Kshara Sutra* Ligation.

POST OPERATIVE

The next morning, the patient was advised to take *Avagaha Swedana* (warm water sitz bath) with *a Panchavalkala* decoction twice daily until complete wound healing. A diet rich in green vegetables, fruits, and liquids is recommended. The patient was instructed to avoid non-vegetarian food, spicy and oily dishes, junk food, tobacco, and alcohol consumption. In addition, prolonged sitting, riding, and travel were discouraged. To prevent constipation, *panchsakar* powder (5 g) in lukewarm water was prescribed at bedtime. (Fig.01)

OBSERVATION AND RESULT

The patient was discharged the following day and was instructed to return daily for wound dressing for the first seven days. After this period, weekly visits were scheduled for *the*

Ksharasutra changes. The patient underwent a sitz bath with *a Panchavalkala* decoction, followed by daily dressing with *jatyadi taila*. The *Ksharasutra* was replaced weekly using the railroad technique, in which a new *Ksharasutra* was inserted into the fistulous tract after applying 2% xylocaine jelly, continuing until complete cut-through and healing were achieved. The length of the *ksharasutra* was recorded at each change to monitor the progress of cutting and healing.

By the 15th day, the wound had cleaned, and healthy granulation tissue had formed (Figure-3). The sitz bath, wound cleaning with *Panchavalkala* decoction, and dressing with *jatyadi taila* were continued alongside *Ksharasutra* changes. Weekly assessments (Fig.02) revealed healthy granulation, epithelialization, and wound contraction. Complete cutting and healing of the fistulous tract took one month. The Unit Cutting Time (UCT) for this case was 10 days per cm.

PATIENT PERSPECTIVE

The patient reported significant improvement in symptoms throughout the treatment period. The pain and discomfort gradually decreased as the fistula healed. The ability to continue daily activities without major disruptions was appreciated. The patient found sitz baths with *Panchavalkala* decoction soothing, and noted faster wound healing. Weekly *Ksharasutra* changes were well tolerated with minimal discomfort. The patient expressed satisfaction with the treatment outcome, particularly the absence of complications and natural healing process.

CONCLUSION

This case demonstrates the effectiveness of combining partial fistulectomy with *Ksharasutra* ligation in managing low-lying transsphincteric fistula-in-ano. The use of Ayurvedic principles, including *the Panchavalkala* decoction for sitz baths and *Jatyadi Taila* for wound dressing, contributed to the healing process. This case supports the integration of Ayurvedic techniques with modern surgical approaches in the management of anorectal fistulas, offering a promising alternative for patients seeking effective and minimally invasive treatment options.

REFERENCES

1. Shastri A. *Sushruta Samhita: Sutrasthana. Avarniyamadhyaya*. 12th ed. Varanasi: Chowkhambha Sanskrit Sansthan; 2001. p. 136.
2. Jain SK, Kaza RCM, Pahwa M, Bansal S. Role of cyanoacrylate in the management of low fistula in ano: a prospective study. *Int J Colorectal Dis*. 2008;23(4):355–8.
3. Johnson EK, Gaw JU, Armstrong DN. Efficacy of anal fistula plug vs. fibrin glue in closure of anorectal fistulas. *Dis Colon Rectum*. 2006;49(3):371–6.
4. Pescatori M, Ayabaca S, Caputo D. Can anal manometry predict anal incontinence after fistulectomy in males? *Colorectal Dis*. 2004;6(2):97–102.
5. Shastri A. *Sushruta Samhita: Sutrasthana. Ksharpakavidhimadhyayam*. 12th ed. Varanasi: Chowkhambha Sanskrit Sansthan; 2001. p. 35.
6. Sharma PV. *Chakradata: Chikitsasthan. Arshachikitsaprakranadhayay*. 1st ed. Varanasi: Chowkhambha Publisher; 2007. p. 87.
7. Mishra BS. *Bhavprakash: Madhya Khanda. Arsho-adhikaradhayay*. 11th ed. Varanasi: Chowkhambha Sanskrit Bhavan; 2007. p. 66.
8. Dwivedi AK, Chaudhry M, Kulshreshtha DK, Sarin JPS. Standarization of Ksharasootra. *J Res Ayurveda Siddha*. 1991;12(1–2):85–92.