

## COMBINED KṢĀRASŪTRATHERAPY AND KṢĀRAJALA INFILTRATION IN ŚATAPONAKA BHAGANDARA (COMPLEX FISTULA-IN-ANO): A CASE STUDY

Dr. Hebbare Revathi Bai<sup>1\*</sup>, Dr. K. Srinivasa Kumar<sup>2</sup>

<sup>1</sup>Final Year P.G. Scholar, P.G. Dept. of Shalya Tantra, S.V. Ayurvedic College.

<sup>2</sup>Professor (P.G), P.G. Dept. of Shalya Tantra, S.V. Ayurvedic College, Tirupati. A.P.

Article Received on 25 March 2026,  
Article Revised on 16 April 2026,  
Article Published on 01 May 2026

<https://doi.org/10.5281/zenodo.19876117>

### \*Corresponding Author

Dr. Hebbare Revathi Bai

Final Year P.G. Scholar, P.G. Dept.  
of Shalya Tantra, S.V. Ayurvedic  
College.



**How to cite this Article:** Dr. Hebbare Revathi Bai<sup>1\*</sup>, Dr. K. Srinivasa Kumar<sup>2</sup> (2026). Combined Kṣārasūtratherapy and Kṣārajala INFILTRATION in Śataponaka Bhagandara (Complex Fistula-In-Ano): A Case Study. World Journal of Pharmaceutical Research, 15(9), 625–632.

This work is licensed under Creative Commons Attribution 4.0 International license.

### ABSTRACT

**Background:** Bhagandara, a chronic and recurrent anorectal disorder, is characterized by multiple openings, pus discharge, and pain. It resembles a *complex fistula-in-ano* in modern surgical terminology. Kṣārasūtra therapy, one of the effective *para-surgical measures* described by Ācārya Suśruta, offers simultaneous cutting, drainage, and healing of the tract. Kṣārajala infiltration enhances *śodhana* and *ropana* actions, providing faster recovery and reducing recurrence. **Case-Summary:** A 64-year-old male patient presented with multiple perianal openings, pain, and discharge following incision and drainage. Examination revealed multiple external openings with induration. Probing confirmed interconnected tracts, suggestive of a complex fistula (Śataponaka Bhagandara). Routine investigations were within normal limits. The condition was diagnosed as Śataponaka Bhagandara.

**Intervention:** Treatment protocol included *VibhitakīKṣārasūtra* application weekly and *Vibhitakī Kṣārajala* infiltration (10 ml) every 3 days for 6 weeks, followed by oral administration of *Triphala Guggulu*, *Saptaviṃśati Guggulu*, *Abhayāriṣṭa*, and *Pañcasākara Cūrṇa* for 10 weeks. **Results:** By the third week, 50% symptomatic relief was observed. At 10 weeks, the fistulous tract completely healed with closure confirmed by MRI fistulogram. Pain and discharge ceased, and inflammatory markers improved significantly. **Conclusion:** Kṣārasūtra therapy combined with Kṣārajala infiltration offers a minimally invasive, safe, and economical treatment for complex fistula-in-ano, achieving effective tract healing and

preventing recurrence.

**KEYWORDS:** Bhagandara, Kṣārasūtra, Kṣārajala, Complex Fistula-in-Ano, Vibhitakī.

## INTRODUCTION

Managing Bhagandara remains a surgical challenge due to the high rate of recurrence associated with conventional treatment methods. Bhagandara is a chronic suppurative condition of the anorectal region described in classical Ayurvedic texts, particularly Sushruta Samhita. It presents with features such as pain, pus discharge, and recurrent abscess formation, significantly affecting the patient's quality of life.

In modern surgical practice, fistula-in-ano is treated with procedures such as fistulotomy, fistulectomy, or seton placement. However, these methods often result in recurrence or complications such as sphincter injury.

Kṣārasūtra therapy, an established Ayurvedic technique, ensures gradual cutting and healing of the fistulous tract with minimal damage to surrounding structures. Due to its proven efficacy and low recurrence rate, this treatment was adopted in the present case.

## CASE REPORT

### a) Patient Information

- Age: 64 years
- Gender: Male
- Occupation: Presently Unemployed (Earlier Car driver) &
- Socioeconomic status: upper middle class.

### b) Chief Complaints

C/o throbbing pain & bleeding from the perianal region since 1 month, associated with fever, constipation, occasional pus discharge from the anal canal for the past 1 month.

### c) History of Present Illness

A 64- year- old male patient was apparently normal before 2 months. Suddenly, he developed a boil in the perianal region. So, he consulted some allopathic hospital & diagnosed it as a perineal abscess, & underwent surgical treatment I&D. But even after a few weeks, he did not find any relief, no proper wound healing, hence he came to SVAYH & got admitted presenting with C/o throbbing pain & bleeding from perianal region since 1 month associated

with fever on & off, constipation, occasional pus discharge from anal canal past 1 month. Hence, treatment was given after proper diagnosis.

**d) Past History**

- ✓ No H/O Diabetics mellitus, Hypertension.
- ✓ S/H/O Incision & Drainage 45 days ago.

**e) Personal History**

- Bowel - Constipated (pass stool once in 2 days).
- Appetite – low,
- Sleep - disturbed,
- Micturition - regular D/N – 4/1 times,
- Addiction: Alcoholism, Smoking.

**CLINICAL FINDINGS**

➤ CVS, CNS, RS – Normal & NAD

➤ *On Inspection:*

Multiple openings seen at perianal region with a wide open wound at 12'O clock position.

➤ *On Palpation:*

- Local temperature +++,
- Tenderness ++,
- Induration+,
- Active pus discharge+,
- Mild edema+.

***On Per-rectal Examination***

- a wide open abscess with 2 external openings seen at the 12 o'clock position with a corresponding internal opening,
- an external opening at 1 o' Clock position 2-3 cm away from the anal verge with corresponding internal openings.
- A connecting track is seen between 2 external openings.

**Blood Investigations on 14/10/2023**

1. Haemoglobin - 12.2%      \*CRP - 47mg/dl
2. \*ESR – 97mm/hr

3. CT – 5<sup>1</sup> 11<sup>ll</sup>
4. BT - 3<sup>1</sup> 2<sup>ll</sup>
5. RBS -104 mg/dl
6. HIV – Negative
7. HbsAg –Negative

### Urine Routine

- Sugar: Nil
- Albumin: Nil
- M/E- Pus cells - 2-4 hpf
- Endothelial cells - nil hpf

### MRI Fistulogram Impression

- Complex fistula in ano.

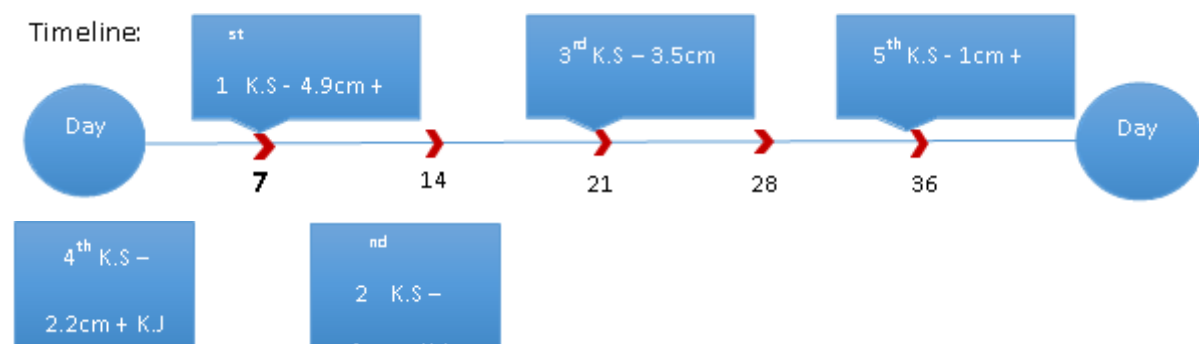
### DIAGNOSIS

- ✓ **Ayurvedic:** Shataponaka Bhagandara
- ✓ **Modern:** Complex Fistula-in-Ano

According to Ayurveda - Due to the presence of symptoms like **Aneka vrana** (multiple openings), Pakwa pidaka, daruna ruja, bhinna aruna phenava hini (reddish yellow with froathy discharge) it is diagnosed as Shataponaka or vataja bhagandara.

### TREATMENT PLAN

- Complete Treatment given for 10weeks.
- Initially Vibhitaki Ksharasutra thread change once in 7days f/b Vibhitaki Ksharajala infiltration once in 3days up to 6weeks.



1. Tab.Triphala Guggulu 1-1-1 AF.
2. Tab. Sapta vimshati Guggulu 1-1-1 AF.
3. Abhayarista 15ml TID with equal water.
4. Panchasakara Churnam 1tsp BT with L.W.W.
5. Sitz bath with panchavalakala qwatha churnam twice daily.
6. Vrana Shodhana tailam E/A. f/b Dietary and lifestyle modification explained.

#### a) Pre-operative

- Inj.TT 0.5cc [IM], Inj. Xylocaine 2% 0.5cc [SC] test dose given,
- routine blood investigations,
- Bowel preparation with mild laxatives,
- Part preparation and aseptic measures,
- Informed consent obtained,
- Patient kept NPO before the procedure.

#### b) Operative Procedure

##### ➤ Kṣārasūtra Application

- Patient positioned in the lithotomy position,
- Aseptic precautions maintained,
- Xylocaine 2% 1:1 diluted with distilled water & given along the track,
- External opening detected at 10' Clock position 2-3 cm away from the anal verge. Probe passed through the fistulous tract and was taken out through the external opening at the 12 o'clock position.
- Vibhitaki Kṣārasūtra threaded through the tract, and knots were secured.
- Haemostasis secured.

##### ➤ Kṣārajala Infiltration

- Vibhitaki Kṣārajala was prepared as per the classical method.
- Vibhitaki Ksharajala infiltration (10ml) once in 3days upto complete healing of a track, It is Injected into secondary tracts on at a wide open abscess with 2 external openings seen at the 12 o'clock position with a corresponding internal opening, using syringe.

#### c) Post-operative Care

- T- Bandage applied, advised to do regular wound dressing,
- Sitz bath (warm water/medicated decoction)

- Weekly Kṣārasūtra change
- Internal medicines (as mentioned above)
- High-fiber diet and adequate fluids
- Avoid constipation
- Monitor pain, discharge, infection
- Gradual cutting and healing observed

## RESULTS

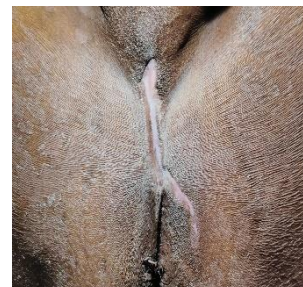
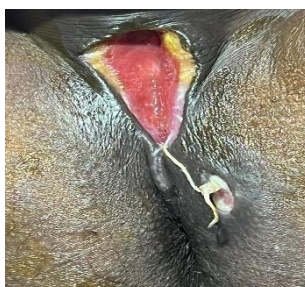
- **Reduction in symptoms:** After 3 weeks of treatment patient got 40-50% relief.
- **Outcomes at endpoint**

At 10 weeks, symptoms resolved completely (pain VRS: 4→0; discharge: 4→0); inflammatory markers normalized (CRP: 47→2 mg/L); MRI confirmed tract closure. Unit cutting rate steady (6 days/cm); 40-50% relief by week 3.

Subjective parameters	Before	During
1. Discharge (VRS)	4	1
2. Pain	4	2
3. Swelling	4	2

Objective parameters	Before	During
1. Unit cutting time(1cm)	6 days	6 days
2. Tenderness	4	2
3. Complete healing time	Initial 4.9cm	3.5 cm

Before Treatment    During Treatment    After Treatment



## DISCUSSION

The combined action of *Kṣārasūtra* and *Kṣārajala* provides mechanical debridement and chemical cauterization.

## Cellular-Level Mode of Action of Kṣārasūtra &amp; Kṣārajala

Stage	Āyurvedic Concept	Modern Correlation (Cellular Mechanism)
<b>1. Application Phase</b>	<i>Kṣāra</i> possesses <b>Uṣṇa, Tīkṣṇa, Lekhana, Vilayana</b> and <b>Śodhana</b> properties. It dissolves <i>mala, māṃsa, medo dhātu</i> from the tract.	Alkaline Kṣāra causes <b>protein denaturation, lipid saponification, and lysis of necrotic tissue</b> , similar to controlled <b>chemical cauterization</b> .
<b>2. Śodhana (Cleansing) Phase</b>	Removal of <i>dūṣita māṃsa</i> (slough) and <i>kleda śoṣaṇa</i> (moisture absorption) occurs.	<b>Osmotic dehydration</b> of the infected tissue reduces bacterial load; the high pH environment inhibits microbial growth.
<b>3. Ropaṇa (Healing Initiation)</b>	<i>Ropaṇa guṇa</i> of Kṣāra and <i>Kṣārajala</i> initiates healthy granulation and <i>dhātu utpatti</i> ( <i>tissue regeneration</i> ).	<b>Macrophage activation and fibroblast proliferation</b> occur, releasing growth factors (TGF-β, VEGF), promoting <b>angiogenesis and collagen synthesis</b> .
<b>4. Lekhana &amp; Vilayana (Debridement)</b>	<i>Lekhana</i> scrapes fibrosed tissue; <i>Vilayana</i> liquefies debris for easy drainage.	Controlled <b>enzymatic degradation of necrotic tissue and lysis of fibrotic septa</b> enable proper drainage and tract remodeling.
<b>5. Pākavasthā &amp; Dhātu Pūraṇa</b>	Maturation of <i>māṃsa dhātu</i> results in smooth epithelial closure and <i>māṃsa sāra vardhana</i> .	<b>Collagen remodeling and epithelialization</b> close the fistulous tract, forming a healthy scar with minimal recurrence.

## CONCLUSION

□ *Kṣārasūtra Application* → Controlled Tissue Cauterization → Protein Denaturation → Macrophage & Fibroblast Activation → Collagen Remodeling → Angiogenesis → Tract Closure (*Ropaṇa Siddhi*).

- In the context of multiple openings treated with the parasurgical intervention of the IFTAK procedure, a successful resolution emerges, as evidenced in this case.
- This Ksharasutra's ushna-lekhana acts as debridement and lysis of tissues, with antifungal, anti-inflammatory, and antimicrobial effects.
- Another potential action of the chemical component is to destroy residual glands in the epithelium.
- It serves as a counter-irritant to pain elsewhere and produces a draining sore that helps remove harmful materials from the body.
- Simultaneously, Ksharajala has properties of Ushna, Vilayana, Shodana, Ropana,

Shoshana, Lekhana, Dharana, Krimigna, and Stambaka, & Vibhitaki-derived tannins/gallotannins chelate iron in cryptoglandular epithelium, preventing residual glandular hyperplasia, which shows tremendous results in healing fibrosed fistulous tracts.

### **Integrated Oral Effects**

Guggulu steroids (guggulsterones) suppress NF- $\kappa$ B in perianal fibroblasts, downregulating TGF- $\beta$ /Smad signaling to inhibit extracellular matrix deposition; arishta/panchasakara enhance peristalsis via enteric 5-HT<sub>4</sub> agonism, normalizing purisha mutra srotas.

This bridges samprapti vighatana with targeted anti-fibrotic immunomodulation, evidenced by radiological/symptom resolution.

### **PATIENT CONSENT**

“Informed verbal consent was obtained from the patient.”

### **“REFERENCES”**

1. Sushruta, *Sushruta Samhitā*, with *Nibandhasaṅgraha* commentary by Dalhaṇa, Chikitsasthāna 17/29–33, Chaukhamba Orientalia, Varanasi, 2018.
2. Dwivedi V, Dwivedi S. Role of Ksharasutra in the treatment of fistula-in-ano. *Anc Sci Life*. 1993; 12(3–4): 370–373.
3. Sharma P.V. *Dravyaguna Vijnana*, Vol II, Chaukhamba Bharati Academy, Varanasi, 2015: 567–569.
4. Bailey & Love's *Short Practice of Surgery*, 27th ed., CRC Press, 2018; 1361–1365.
5. Singh V, Gupta S. Role of Ksharasutra and Ksharajala in the management of Bhagandara (fistula-in-ano): A clinical evaluation. *AYU Journal*. 2011; 32(2): 222–226.