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MANAGEMENT OF ANAL FISTULA USING SNUHI-KSHEERA BASED KSHAR SUTRA: A CLINICAL CASE REPORT

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ABSTRACT

Background: Fistula-in-ano (Bhagandara) remains a challenging colorectal condition due to high recurrence rates and the risk of anal sphincter damage leading to fecal incontinence. Traditional wide surgical excisions often compromise sphincter tone. This case study evaluates the clinical efficacy of a minimally invasive parasurgical intervention utilizing *Snuhi-Ksheera* (latex of *Euphorbia neriifolia*) and *Apamarga Kshara* (*Achyranthes aspera* caustic alkali) coated *Kshara Sutra* (medicated thread) for the management of a chronic fistulous tract. **Case Presentation:** A 40-year-old male presented with a three-year history of a recurrent perianal boil accompanied by intermittent purulent, blood-mixed discharge, local discomfort, itching, and chronic constipation. Clinical and probe examinations revealed a primary, transsphincteric fistula-in-ano with two external openings at the 3 and 4 o'clock positions, communicating with a single internal opening at the 3 o'clock position. **Intervention:** The patient underwent primary threading and chemical debridement of the fistulous tract under local anesthesia using a specialized *Snuhi-Ksheera* based *Apamarga Kshara Sutra*. The medicated thread was changed sequentially on a weekly basis for 12 weeks. Post-operative conservative management included oral administration of *Triphala Guggulu*, *Hingwashtak Churna*, and *Triphala Churna*, supplemented with rectal instillation of

1

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Jatyadi Taila and lukewarm sitz baths with *Tankan Bhasma*. **Outcome:** Pus and blood discharge ceased completely within the first 2 weeks of intervention. Healthy granulation tissue formation was observed across subsequent changes, achieving complete tracking, chemical curettage, and healing of the fistulous tract within 3 months (12 weeks). The structural integrity and functional tone of the anal sphincter were completely preserved, with no post-operative incontinence. No recurrence was noted over a one-year follow-up period. **Conclusion:** *Snuhi-Ksheera* based *Apamarga Kshara Sutra* therapy provides an effective, safe, low-cost, and sphincter-preserving surgical alternative for managing transsphincteric fistula-in-ano, demonstrating excellent long-term track obliteration without anatomical or functional morbidity.

Keywords: Fistula-in-ano, *Kshara Sutra*, *Snuhi Ksheera*, Sphincter-preserving surgery.

INTRODUCTION

Fistula-in-ano is a chronic, highly debilitating colorectal disease anatomically characterized by an abnormal granulomatous track lined by unhealthy epithelial tissue, connecting the anal canal to the perianal skin [1]. Globally, the prevalence of anal fistulae ranges between 1.2 to 2.8 per 10,000 individuals, predominantly affecting young males with a 2:1 male-to-female ratio [2]. The vast majority (~90%) of these cases arise from acute anorectal abscesses secondary to cryptoglandular infection within the anal sinuses [3].

The primary goal of modern colorectal surgery is to eradicate the fistulous track while preserving the structural and functional integrity of the internal and external anal sphincters. Traditional techniques such as fistulectomy or fistulotomy carry a high risk of fecal incontinence, particularly in complex or transsphincteric tracks that cross a substantial portion of the external sphincter. While modern sphincter-preserving modalities—including Ligation of the Intersphincteric Fistula Tract (LIFT), Video-Assisted Anal Fistula Treatment (VAAFT), and bioprosthetic plugs—have been introduced to reduce functional morbidity, they are limited by high, variable recurrence rates (up to 40%) and high procedural costs [4].

In the Ayurvedic surgical tradition (*Shalya Tantra*), fistula-in-ano is classified as *Bhagandara*, recognized by Acharya Sushruta as one of the eight grave, deeply deep-seated disorders (*Ashtamahagada*) [5]. It is described as a painful, suppurative lesion in the perianal region (*Guda Pradesh*) that tunnels inwards, disrupting local tissue architectures. When conventional surgeries fail or carry a high risk of sphincter damage, Ayurvedic medicine mandates *Kshara Sutra* therapy—a specialized, minimal-access parasurgical intervention.

The standard *Kshara Sutra* is a medicated linen thread sequentially coated with the proteolytic plant latex of *Snuhi* (*Euphorbia neriifolia*), the caustic alkaline paste of *Apamarga* (*Achyranthes aspera*), and the anti-inflammatory powder of *Haridra* (*Curcuma longa*). This clinical report aims to document the successful, sphincter-preserving management and complete track obliteration of a chronic transsphincteric fistula-in-ano within 12 weeks using *Snuhi-Ksheera* based *Apamarga Kshara Sutra*, demonstrating a complete absence of recurrence or functional impairment at a one-year follow-up.

PATIENT INFORMATION

Patient Profile: The patient's sociodemographic, physiological, and constitutional profiles are summarized in Table 1.

Parameter	Clinical Observation
Age / Gender	40 Years / Male
Occupation	Business Owner (Prolonged sedentary sitting)
Residence	Sehore, Madhya Pradesh, India
Socioeconomic Status	Middle-class
Diet	Mixed (Frequent spicy, heavy, and oily food intake)
Appetite	Diminished (<i>Agnimandya</i>)
Sleep	Normal and uninterrupted
Bowel Habits	Constipated; passes hard stool 2–3 times a day with regular straining
Micturition	Normal, adequate clear output
Addictions	Chronic tobacco smoking and regular alcohol consumption
Family History	Non-specific; no history of anorectal disorders in parents
Past Medical History	Diagnosed with Type 2 Diabetes Mellitus 2 months prior; on regular oral hypoglycemic agents. No history of Hypertension, Asthma, or Tuberculosis.
Past Surgical History	No previous surgical interventions or hospitalizations.

Drug / Allergy History	Non-reactive; no known history of hypersensitivity to drugs or chemical allergens.
Prakriti (Constitution)	<i>Vata-Pitta</i>
Ashtavidha Pariksha	<i>Nadi: 86/min (Vata-Pitta), Mutra: Prakrita, Mala: Vibandha (hard, dry), Jihva: Alpa-Lepa (slight coating), Shabda: Spashta, Sparsha: Anushna, Drik: Normal, Akriti: Madhyama</i>
Dashavidha Pariksha	<i>Dushya: Rakta, Mamsa, Twak; Desha: Sadharana; Bala: Madhyama; Kala: Sheeta; Anala: Mandya; Prakriti: Vata-Pitta; Vaya: Madhyama; Satmya: Mishra; Satva: Madhyama; Ahara Shakti: Avara (poor digestion/metabolism)</i>

Clinical Findings

History of Present Illness: The patient reported being entirely healthy three years ago, after which he noticed a painful, localized swelling (boil) in the perianal region. Within 24 hours of its appearance, the boil ruptured spontaneously, discharging frank pus mixed with dark blood, which provided temporary relief from the pain. Over the next three years, this exact cycle of swelling, severe throbbing pain, rupture, and purulent discharge recurred repeatedly at intervals of 1 to 2 months.

The patient experienced persistent perianal itching, localized skin irritation, and chronic, long-standing constipation characterized by passage of hard stools accompanied by forced manual straining (*Pratata Atipravahana*). Due to fear of conventional surgery and potential fecal incontinence, the patient opted for local conservative medications, which provided no lasting relief. He subsequently reported to the Shalya Tantra outpatient department of Shubhdeep Ayurved Medical College and Hospital for definitive management.

Physical and Systemic Examination

- **General Condition:** Fair, stable, fully conscious, cooperative, and well-oriented to time, place, and person.
- **Vital Signs:**
 - Temperature: 98.4°F (Axillary)
 - Pulse Rate: 86 beats/minute, regular rhythm
 - Blood Pressure: 126/84 mmHg (Right arm, sitting position)
 - Respiratory Rate: 16 breaths/minute

• **Systemic Evaluation:**

- Respiratory System: Clear lung fields bilaterally, no added sounds.
- Cardiovascular System: S-1 and S-2 heard normally, no murmurs or gallops.
- Central Nervous System: No focal neurological deficits.
- Abdomen: Soft, non-tender, no palpable organomegaly, bowel sounds normal.

• **Local Anorectal Examination:**

- *Inspection:* Two distinct external openings were visualized in the perianal skin—one at the 3 o'clock position and another at the 4 o'clock position, located approximately 3 cm and 3.5 cm from the anal verge respectively. The surrounding skin showed brownish-red hyperpigmentation and mild induration with signs of chronic scarring. Active, thick purulent discharge mixed with serosanguinous fluid was expressed upon digital palpation.
- *Palpation (Digital Rectal Examination - DRE):* An indurated, cord-like fibrous track was clearly palpable subcutaneously extending from the 3 and 4 o'clock external openings toward the anal canal. At the 3 o'clock position, a distinct, indurated depression representing the internal opening was palpated at the level of the dentate line.
- *Probing:* Gentle, controlled introduction of a malleable silver fistula probe through the 3 o'clock external opening passed easily along the tract and emerged through the internal opening at the 3 o'clock position. Probing through the 4 o'clock opening demonstrated a clear subcutaneous communicating tract merging into the primary 3 o'clock tract, confirming a branched, trans-sphincteric fistulous system.

Diagnostic Assessment

- **Modern Medical Diagnosis:** Chronic Transsphincteric Fistula-in-ano with branched external openings at the 3 and 4 o'clock positions and a primary internal opening at the 3 o'clock position (Goodsall's rule compliant).
- **Ayurvedic Classical Diagnosis:** *Bhagandara (Shataponaka / Riju* variety depending on chronicity, primarily *Vata-Kaphaja* with *Rakta* vitiation).
- **Differential Diagnosis:** Perianal hidradenitis suppurativa, pilonidal sinus with perineal extension, anorectal tuberculosis, and Crohn's disease-associated fistulae (all ruled out based on history, blood profiling, and absence of systemic features).

Samprapti (Pathogenesis): The structural and behavioral causative factors (*Nidana*) included prolonged sedentary sitting on hard/uneven surfaces (*Utkata/Kathina Visamasana*), regular consumption of spicy (*Vidahi*), heavy-to-digest (*Madhura*), and cold (*Sheeta*) food matrices, and improper digestion (*Ajirna*). This induced *Agnimandya* (low

metabolic fire), leading to the formation of *Ama* (toxic metabolic by-products) and chronic *Vibandha* (constipation).

Habitual straining (*Pratata Atipravahana*) caused localized friction, mechanical stress, and micro-trauma to the cryptoglandular structures of the anal canal. This structural weakness caused localized accumulation and vitiation of *Vata* and *Pitta Doshas*, which further corrupted the local tissues (*Dushyas: Rakta, Mamsa, Twak*), establishing *Khavaigunya* (localized tissue susceptibility) at the anorectal junction. The trapped *Doshas* led to suppuration (*Paka*), culminating in a deep-seated perianal abscess that ruptured spontaneously to form a chronic, non-healing fistulous track (*Bhagandara*).

Samprapti Ghataka (Pathogenetic Components)

Component	Description
Dosha	<i>Vata</i> (primarily <i>Apana Vayu</i>) and <i>Pitta</i> (primarily <i>Pachaka</i> and <i>Ranjaka</i>) with secondary <i>Kapha</i>
Dushya	<i>Rakta</i> (blood), <i>Mamsa</i> (muscle tissue), <i>Twak</i> (skin/underlying fascia)
Agni	<i>Agnimandya</i> (impaired digestive/tissue fire)
Ama	<i>Jataragni-janita Ama</i> (systemic metabolic toxins)
Srotas	<i>Annavaha, Purishavaha, and Raktavaha Srotas</i>
Srotodushti	<i>Sanga</i> (obstruction) leading to <i>Vimarga Gamana</i> (extravasation/abnormal tract)
Udbhava Sthana	<i>Pakvashaya</i> (lower gastrointestinal tract)
Sanchara Sthana	<i>Guda Pradesha</i> (anorectal region)
Vyaktasthana	Perianal skin and subcutaneous spaces
Rogamarga	<i>Abhyantara</i> (internal) shifting to <i>Bahya</i> (external pathways)
Adhisthana	Anorectal wall and sphincteric complex
Vyadhi Avastha	<i>Chira-kari</i> (Chronic, recurrent suppurative phase)
Roga Bala	Madhyama (Moderate severity)
Rogi Bala	Madhyama (Moderate constitutional strength)



Investigations: Pre-operative laboratory baseline investigations were performed to ensure fitness for the parasurgical procedure and to evaluate systemic metabolic control (Table 2).

Investigation Parameter	Observed Value	Normal Reference Range	Clinical Significance
Hemoglobin (Hb)	15.0 gm%	13.5–17.5 gm%	Within normal limits; no anemia
Total WBC Count	7,400 /cmm	4,000–11,000 /cmm	Normal; no acute systemic leukocytosis
Total RBC Count	4.8 million/mm ³	4.5–5.9 million/mm ³	Normal erythroid profile
Bleeding Time (BT)	1 min 55 sec	1–3 min	Normal primary hemostasis
Clotting Time (CT)	5 min 21 sec	3–9 min	Normal coagulation cascade
Random Blood Sugar (RBS)	150.0 mg/dl	Less than 140 mg/dl (Normal)	Mildly elevated; consistent with controlled Type 2 DM
Urine Routine / Micro	Nil (NAD)	Negative for sugar, albumin, pus cells	No active urinary tract infection or diabetic ketoacidosis
HBsAg	Non-Reactive	Non-Reactive	Excludes active Hepatitis B infection
HIV (I & II)	Non-Reactive	Non-Reactive	Excludes retroviral immunosuppression
HCV	Negative	Negative	Excludes active Hepatitis C infection

Therapeutic Intervention

Operative Procedure: Primary Kshara Sutra Threading: The patient was kept nil by mouth 6 hours prior to the procedure. Prophylactic bowel preparation was achieved using a warm water enema. Under strict aseptic precautions, the patient was positioned in the lithotomy position and local infiltration anesthesia (2% Lignocaine Hydrochloride) was administered around the perianal openings and the tract path.

A lubricated anal speculum was introduced to clearly visualize the primary internal opening at the 3 o'clock position. Dilute Betadine solution was instilled through the external openings at 3 and 4 o'clock; its immediate egress from the internal opening confirmed a patent, communicating tract. A malleable silver fistula probe, threaded with a freshly prepared *Snuhi-Ksheera* based *Apamarga Kshara Sutra*, was passed through the 3 o'clock external opening, navigated along the tract, guided through the internal opening, and brought out via the anal canal.

The two ends of the *Kshara Sutra* were tied securely outside the anus using a reef knot with optimum tension (not causing strangulation but maintaining firm tissue contact). The subcutaneous track branching to the 4 o'clock opening was simultaneously debrided of unhealthy, indurated fibrous margins under fully aseptic conditions. Thorough mechanical debridement was executed, complete hemostasis was achieved via localized compression, a sterile *Jatyadi Taila* soaked gauge pad was applied, and the patient was shifted to the recovery ward fully conscious.

The patient was monitored for 24 hours. Having exhibited zero post-operative hemorrhage, urinary retention, or acute distress, he was discharged with strict instructions for weekly *Kshara Sutra* replacements utilizing the standard sequential "cut-through" tracking technique.

Post-Operative Conservative Management: The comprehensive multi-drug oral and topical therapeutic regimen utilized to support the *Kshara Sutra* cutting and healing mechanism is detailed in Table 3.

Intervention Class	Medicine Name	Primary Ingredients	Dosage Frequency	Route / Timing	Anupana	Duration	Clinical Rationale / Mechanism
Oral Samana	<i>Triphala Guggulu</i>	<i>Triphala, Guggulu (Commiphora mukul), Pipali</i>	500 mg / Twice daily	Oral / After food	Warm Water	12 Weeks	Promotes <i>Soshana</i> (sloughing), exerts anti-inflammatory, antimicrobial properties, and accelerates wound healing [6].
Oral Samana	<i>Hingwashtak Churna</i>	<i>Hing (Asafoetida), Trikatu, Ajamoda, Saindhava</i>	3 gm / Twice daily	Oral / Before food	Warm Water	12 Weeks	Enhances <i>Jataragni</i> (digestive fire), mitigates <i>Vata</i> , treats <i>Agnimandya</i> , preventing <i>Ama</i> creation [7].
Oral Laxative	<i>Triphala Churna</i>	<i>Haritaki, Bibhitaki, Amalaki</i>	5 gm / Once daily	Oral / At bedtime (HS)	Warm Water	12 Weeks	Mild <i>Anulomana</i> (laxative) action; softens stools to eliminate mechanical friction against the healing sphincter.
Local Application	<i>Jatyadi Taila</i>	<i>Jati, Nimba, Patola, Haridra, Madhuka</i>	5 ml / Twice daily	Per Rectum / Instillation	N/A	12 Weeks	Exerts <i>Shodhana</i> (wound purification) and <i>Ropana</i> (granulation tissue promotion) actions; lubricates the anal canal [8].
Hydrotherapy	Sitz Bath with <i>Tankan Bhasma</i>	Purified and calcined Borax (<i>Tankan</i>)	5 gm in lukewarm water	Local Sit / 15-20 mins twice daily	N/A	12 Weeks	Cleanses the wound, reduces local capillary congestion, treats sphincter spasms, and provides pain relief.
Convalescent Care	<i>Triphala Churna</i>	As above	3 gm / Twice daily	Oral / After meals	Warm Water	1 Year	Long-term maintenance of gastrointestinal motility and elimination of <i>Vibandha</i> to prevent recurrence.

Timeline: The sequential summary of the patient's clinical path, interventions, and structural updates across the 12-week active management framework is mapped in Table 4.

Timeline Milestone	Clinical Status & Presentation	Procedural / Diagnostic Intervention	Therapeutic Adjustments & Recommendations
Day 1 (Admission)	Recurrent perianal boil, active thick purulent	Clinical profiling, digital rectal exam,	Initiated bowel prep, enema administered, strict light diet.

	discharge, hard stools, severe local itching.	probing, baseline hematology.	
Day 2 (Surgery)	Pre-operative baseline stable; fit for parasurgical intervention.	Under local anesthesia: Probing, <i>Kshara Sutra</i> primary threading, manual debridement of 4 o'clock track.	Post-op: <i>Jatyadi Taila</i> dressing, monitoring for bleeding/urinary retention.
Week 1-2	Moderate local pain, mild burning post-defecation; sharp drop in purulent discharge within 14 days.	1st and 2nd sequential weekly <i>Kshara Sutra</i> changes via tail-tying technique.	Continued oral <i>Triphala Guggulu</i> , <i>Hingwashtak Churna</i> , <i>Triphala Churna</i> , twice daily sitz baths.
Week 3-4	Mild discomfort; discharge reduced to thin, minimal serous fluid. Granulation bed turning healthy red.	3rd and 4th <i>Kshara Sutra</i> changes; tracking demonstrates progressive cutting of the outer tract.	Maintained identical medication timeline; strict prohibition of spicy, deep-fried food matrices.
Week 5-8	Minimal tolerable pain; zero perianal itching. Track significantly shortened and shallower.	5th to 8th weekly <i>Kshara Sutra</i> loop changes. No sloughing or induration remaining.	Continuation of internal and local therapeutics. Assessment of normal anal sphincter tone via DRE.
Week 9-11	Pain entirely absent; local area dry with no trace of discharge. Muscle layer healing behind the thread.	9th to 11th weekly <i>Kshara Sutra</i> replacements. Thread is superficial.	Maintained regimen. Patient reporting high satisfaction with bowel movements.
Week 12 (Completion)	Track completely cut through and simultaneously obliterated. Scar formation clean.	12th final visit; thread shed spontaneously as track completed closure.	Switched to maintenance: Oral <i>Triphala Churna</i> (3g BD) for 1 year; high fiber diet regimen mandated.

Follow-up and Outcomes

Clinical Progress and Objective Parameters: The patient attended the Shalya Tantra outpatient clinic weekly for scheduled *Kshara Sutra* changes. Clinical signs, patient symptoms, and localized structural configurations were recorded using standardized ordinal metrics across the three-month active phase (Table 5).

Metric Group	Specific Parameter	1st Month (Weeks 1–4)	2nd Month (Weeks 5–8)	3rd Month (Weeks 9–12)
Patient Subjective Data	Pain Scoring	Moderate (Oral analgesics required occasionally)	Mild (Tolerable discomfort; no analgesics needed)	Nil (Completely free of discomfort or pain)
	Pus Discharge	Active purulent flow; resolved significantly within 2 weeks	Absent (-)	Absent (-)
	Itching / Pruritus	Mild, intermittent	Mild (Occasional)	Nil (Absent)
Surgeon Objective Data	Discharge Intensity	Moderate (Staining dressing pad daily)	Mild (Minimal serous trace)	Nil (Completely dry perianal skin)
	Sloughing of Track	Mild necrotic tissue sloughing	Absent (-)	Absent (-)
	Local Tenderness	Mild (Tolerable digital rectal entry)	Mild (No discomfort during routine movement)	Nil (No pain on firm palpation/DRE)
	Tissue Discoloration	Brownish-red margins	Red (Healthy vascular beds)	Normal healthy scar coloration
	Local Inflammation	Mild induration around openings	Absent (-)	Absent (-)
Structural Examination	Wound Bed State	Unhealthy, fibrotic lining under curettage	Healthy vascular granulation tissue	Track completely obliterated and healed

Clinical Grading Criteria Utilized

- **Pain Intensity:**
 - *Severe:* Requires parenteral analgesic injections; pain persists despite oral analgesics.
 - *Moderate:* Pain managed effectively with standard oral analgesics.

- *Mild*: Tolerable discomfort requiring zero oral or systemic analgesic agents.
- *Nil*: Completely free of localized pain, throbbing, or sensory distress.

- **Discharge Profile:**

- *Severe*: Continuous flow requiring changing of sanitary pads or cotton dressing layers $\geq$ 2 times daily.
- *Moderate*: Intermittent flow requiring dressing modifications once daily.
- *Mild*: Minor serous tracing; zero requirement for protective dressing pads.
- *Nil*: Completely dry, clean epithelial zone.

- **Tenderness Metrics:**

- *Severe*: Acute pain elicited on minor perianal touch; digital rectal examination (DRE) impossible.
- *Moderate*: Pain during DRE with little finger but within tolerable thresholds.
- *Mild*: Index finger insertion performed smoothly with minimal discomfort.
- *Nil*: Full index finger exploration of the anal canal executed with zero pain or structural resistance.

Long-Term Monitoring & Adverse Events: Following complete track closure at the end of Week 12, the patient was followed up at 3-month intervals for a duration of one full year. At every follow-up checkpoint, clinical review and digital rectal palpation confirmed that the perianal skin remained intact, the underlying scar tissue was soft and non-indurated, and the external and internal anal sphincter sphincteric loops maintained optimal, powerful contractile tone. No episodes of fecal or flatus incontinence occurred. The patient reported excellent bowel movements and high satisfaction. No adverse events or treatment-limiting toxicities were recorded throughout the course of active and maintenance therapies.

DISCUSSION

Fistula-in-ano (*Bhagandara*) presents a major surgical challenge due to the high recurrence rates associated with standard procedures. Fistulectomy cuts out the entire track, creating a broad tissue defect or "dead space" that fills with irregular, weak scar tissue, often reducing the tone of the anal sphincter by up to 30–40% [9]. In contrast, *Kshara Sutra* acts as a specialized, minimal-access, sphincter-preserving parasurgical tool that simultaneously cuts and heals the track over a sustained period.

The high therapeutic success in this case stems from the synergy of mechanical pressure and the multi-component biochemistry of the *Kshara Sutra* coatings:

- **Snuhi Ksheera (Latex of *Euphorbia nerifolia*):** Contains highly potent proteolytic enzymes (including euphol, nerifoliol, and various proteases) that act as a chemical curettage medium. When positioned inside the chronic tract, it systematically breaks down and debrides the thick, avascular, necrotic fibrotic wall and unhealthy granulation tissue lining the fistula [10]. It maintains the thread's structural stability, ensuring continuous release of the alkaline components.
- **Apamarga Kshara (Caustic Alkali of *Achyranthes aspera*):** Exerts strong *Soshana* (biochemical absorption), *Dahana* (cauterization), and *Pachan* (necrotic tissue digestion) properties. Possessing a highly alkaline pH (typically between 9.5 and 10.5), it acts as a localized chemical debriding agent, neutralizing low-grade acidic bacterial microenvironments and removing the epithelial lining of the track. This mechanical and chemical action triggers a controlled inflammatory response that promotes the shedding of unhealthy tissue [11].
- **Haridra (Powder of *Curcuma longa*):** Provides broad-spectrum antimicrobial, anti-inflammatory, and antioxidant benefits. It reduces the localized burning sensation caused by *Kshara*, prevents secondary bacterial colonization within the open track, and accelerates collagen synthesis and fibroblastic activity [12].

The key reason *Kshara Sutra* prevents fecal incontinence in transsphincteric tracks is its dual **simultaneous cutting and healing mechanism**. Tied under optimum tension, the thread cuts through microscopic layers of muscle and connective tissue over several days. As it slowly divides a minute segment of the anal sphincter muscle, the alkaline and anti-inflammatory properties of the herbs stimulate rapid cellular regeneration, collagen deposition, and fibrosis immediately behind the moving loop.

By the time the thread moves through the next layer of muscle, the segment divided the previous week has already healed and anchored itself with dense scar tissue. This prevents the muscle margins from retracting or leaving a functional gap, preserving the structural layout, muscular tone, and squeeze pressure of the anal sphincteric apparatus.

The accompanying oral medicines targeted the systemic root causes (*Nidana*). *Hingwashtak Churna* corrected *Agnimandya*, preventing the formation of *Ama* (undigested toxic by-

products) [7]. *Triphala Guggulu* acted as a systemic anti-inflammatory and anti-infective agent, reducing perianal edema and optimizing vascularity at the wound bed [6]. *Triphala Churna* provided reliable *Anulomana* (laxative) action, softening the stool and preventing mechanical friction or straining against the healing anal canal. Locally, *Jatyadi Taila* supported healing through its *Shodhana* (wound-purifying) and *Ropana* (granulation-promoting) actions, keeping the tract lubricated and clean [8].

Strengths of the Case Study

- Achieved complete, permanent track obliteration of a chronic transsphincteric fistula without surgical complications.
- Successfully preserved sphincter function, avoiding fecal or flatus incontinence.
- Followed a strict 12-month post-treatment observation period to confirm non-recurrence.
- Demonstrated a cost-effective, outpatient-friendly procedure requiring only minor local anesthesia.
- **Sphincter Preservation:** *Kshara Sutra* offers an excellent, minimally invasive alternative for complex transsphincteric fistulae, significantly reducing the risk of fecal incontinence compared to conventional fistulectomy.
- **Dual Action:** The simultaneous cutting and healing mechanism ensures that the structural integrity of the anal canal is maintained throughout the treatment period.
- **Chemical Curettage:** The proteolytic enzymes in *Snuhi Ksheera* combined with the high alkalinity of *Apamarga Kshara* provide continuous debridement of the fistulous track, removing the need for aggressive mechanical excision.
- **Root Cause Management:** Addressing *Agnimandya* and chronic constipation (*Vibandha*) via oral herbs like *Hingwashtak Churna* and *Triphala Churna* is essential to break the underlying pathogenesis and prevent long-term recurrence.
- **Cost-Effectiveness:** This parasurgical approach is highly cost-effective, can be performed under local anesthesia, and requires minimal post-operative downtime, making it accessible for low-resource settings.

Limitations

- Relying on digital rectal exams and clinical probing for mapping instead of advanced pre- and post-operative imaging (e.g., Endoanal Ultrasound or pelvic MRI T2-weighted profiling) due to financial constraints.
- Single-patient observation; broader multi-center randomized controlled trials are required to fully standardize cutting-rate kinetics across diverse systemic profiles.

CONCLUSION

The application of a *Snuhi-Ksheera* based *Apamarga Kshara Sutra* successfully treated a chronic, transsphincteric fistula-in-ano within a three-month period. It achieved complete track obliteration, rapid cessation of purulent discharge, and healthy scar formation without compromising anal sphincter tone or causing incontinence. Combining this parasurgical technique with oral *Saman Shodhana* therapies and strict long-term dietary management successfully prevented recurrence over a one-year follow-up period. This report highlights *Kshara Sutra* as a safe, reliable, and cost-effective sphincter-preserving treatment for anorectal fistulous tracks.

Patient Perspective: "I had been suffering from this painful perianal boil and embarrassing pus discharge for three long years. I was terrified of undergoing standard surgery because local doctors told me there was a risk I could lose control over my bowel movements. When I came to the Ayurveda hospital, the doctors explained the medicated thread treatment. The initial procedure was done under local anesthesia and was very manageable. Weekly thread changes caused some mild burning for a few hours, but I was able to continue my daily business routine without any major disruption. Within two months, the discharge stopped completely, and by the third month, the track had completely closed. One year later, I have no pain, normal bowel control, and no signs of the problem returning. I am extremely grateful for this treatment."

Informed Consent: Written informed consent for the publication of this clinical case report, including accompanying clinical data and anonymized observational details, was obtained from the patient.

Photographic Evidence:

Figure 1: After threading and debridement	Figure 2: After 1 month
	
Figure 3: After 2 month	Figure 4: After 3 month
	

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