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A DUAL MODALITY APPROACH IN TREATING FISTULA-IN-ANO WITH KSHARASUTRA AND SURGICAL INTERVENTION: A CASE REPORT

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ABSTRACT

Background: Bhagandara described in Ayurveda correlates with fistula-in-ano and is considered a Kruchrasadhya Vyadhi due to its chronic and recurrent nature. Ksharasutra therapy is an established Ayurvedic para-surgical procedure. In selected cases, a combined surgical and Ksharasutra approach may improve outcomes. **Case Presentation**: A 50-year-old male presented with pain and foul-smelling pus discharge from the anal canal and left perianal region for 15 days. Pain was throbbing, aggravated by prolonged sitting, and partially relieved after pus discharge. The patient was a known case of diabetes mellitus. Local examination revealed an external opening at the left scrotal base and an internal opening at the 2 o'clock position. Endoanal ultrasonography showed a broad fistulous tract extending to the anterolateral anal wall. **Diagnosis**: Based on clinical features, imaging findings, and Ayurvedic assessment, the condition was diagnosed as Parishravi Bhagandara (fistula-in-ano). **Intervention:** Under spinal anesthesia, fistulotomy followed by primary threading was performed. Ksharasutra was changed weekly with appropriate post-operative care. **Outcome**: The patient showed marked reduction in pain and discharge with progressive

healing of the tract and no complications. **Conclusion**: The dual modality approach with Partial fistulotomy followed by Ksharasutra therapy is a safe, effective, and sphincter-preserving approach for the management of *Parisravi Bhagandara*, particularly in trans-sphincteric fistula-in-ano.

KEYWORDS: Bhagandara, Fistula-in-ano, Ksharasutra, Partial fistulotomy, Shalya Tantra, Ayurveda.

INTRODUCTION

Bhagandara is a chronic anorectal disorder described in Ayurvedic classics and is included among the *Ashtamahagada* by Acharya Sushruta due to its difficult management, prolonged course, and frequent recurrence.[1] The term Bhagandara denotes the destruction of the region between the scrotum (*Vrushana*) and anus (*Asana*), referred to as *Bhaga*.[2] Acharya Sushruta explains that inflammatory swellings (*Pidaka*) arising in the *Bhaga, Guda,* and *Basti* regions undergo suppuration and rupture to form a persistent discharging tract known as Bhagandara.[3]

Sushruta has classified Bhagandara into five types, namely *Shataponaka, Ushtragreeva, Parisravi, Shambukavarta,* and *Unmargi*.[4] Among these, *Parisravi Bhagandara* is characterized by continuous discharge due to predominance of *Kapha* and *Rakta* vitiation. Clinically, the disease presents with pain, purulent discharge, itching, and abnormal tract formation in the *Guda Pradesha*, leading to considerable morbidity.

In contemporary medicine, Bhagandara is correlated with fistula-in-ano, an abnormal inflammatory tract connecting the anal canal or rectum to the perianal skin, most commonly developing as a sequel of cryptoglandular perianal abscess.[5,6] Trans-sphincteric fistula is a frequently encountered type, wherein the tract traverses both anal sphincters, making management challenging.[7]

The etiopathogenesis of Bhagandara involves *Kapha-pradhana Tridosha* vitiation affecting *Twak, Rakta,* and *Mamsa Dhatu*, resulting in *Vidradhi* formation and subsequent tract development. Lifestyle factors such as prolonged sitting, intake of *Guru* and *Abhishyandi Ahara*, irregular food habits, and systemic conditions like diabetes mellitus contribute to chronicity and recurrence.

Ayurveda advocates Ksharasutra therapy as a standard parasurgical modality due to its ability to achieve controlled excision, effective drainage, and simultaneous healing while preserving sphincter function. In complex cases, a combined approach of partial fistulotomy followed by Ksharasutra application provides better tract management and faster recovery. The present case report highlights the successful management of *Parisravi Bhagandara* using this integrative approach.

CASE PRESENTATION

Patient Information

A 50-year-old male patient with OPD No: 29968, Hindu, middle-class, graduate, businessman by occupation, residing at Laggere, Bangalore, presented with complaints of pain and pus discharge from the anal canal and perianal region since 15 days.

Chief Complaints

Pain and pus discharge from the anal canal and perianal region since 15 days.

History of Present Illness

The patient was apparently healthy 15 days prior, after which he noticed throbbing pain and pus discharge per rectum and from the left perianal region. Pain slightly reduced after discharge of pus and aggravated on prolonged sitting. The discharge was thick, foul-smelling, and stained clothes, disturbing daily activities.

Past History

Known case of Diabetes Mellitus since 2 years, on regular medication (Tablet Glycomet GP1 1-0-0). No history of HTN, IHD, COPD, thyroid disorders, or previous surgical illness.

Personal and Occupational History

Diet was mixed with intake of chicken and fish twice weekly. Appetite was reduced. Bowel habits were regular with soft stools once daily. Sleep was sound for 5–6 hours. Occupation involved prolonged sitting hours.

General Examination

Built : Well built

Nourishment : well nourishment

Height : 165cm

Weight : 60kg

BMI : 22Kg/m2

Pallor : Absent

Icterus : Absent

Clubbing : Absent

Cyanosis : Absent

Lymphadenopathy : Absent

Systemic Examination

CNS : Concious, oriented

CVS : S1 and S2 heard

Respiratory System : Normal vesicular breathe sounds heard

Gastrointestinal System : Normal

Vitals

BP : 130/80mmHg

Pulse : 78bpm

Spo2 : 99% at room air

Temp : 970 F

LOCAL EXAMINATION

Position of the patient**:** Lithotomy position.

Inspection

External opening noted in left scrotal base with pus discharge.

Hyper granulation tissue noted around the external opening,

no sentinel pile mass or active bleeding noted at time of inspection.

Palpation

Tenderness present between 1 to 2 O' clock position.

Digital examination

Normotonic sphincter tone

Internal opening at 2 o clock position

Investigations

Hemoglobin: 13.3 g%

WBC: 13,100 cells/cumm

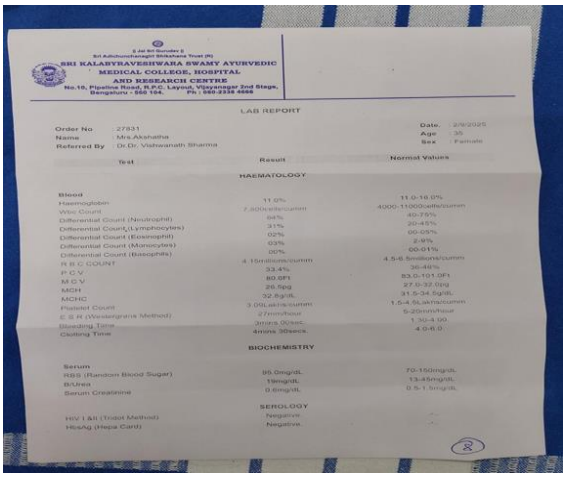
ESR: 85 mm/hr

RBS: 123 mg/dl

Urine routine showed mild sugar traces.

HIV and HBsAg were non-reactive.

Chest X-ray was normal.



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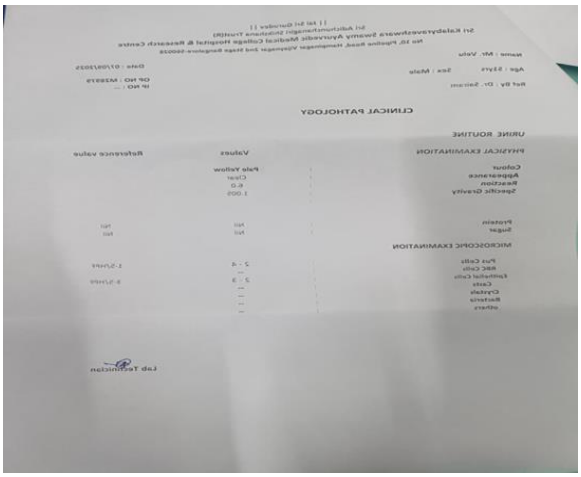
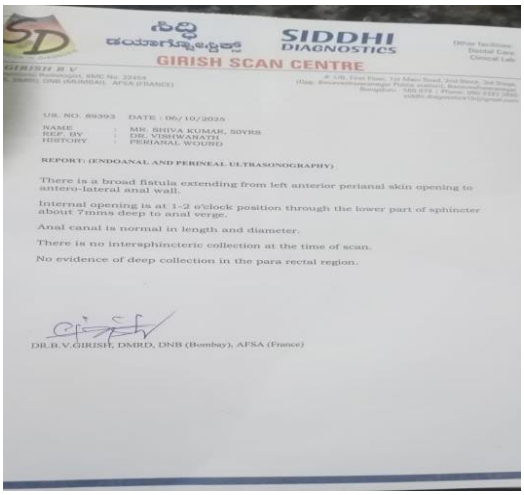
LAB REPORT



Endoanal Ultrasonography

A broad fistulous tract extending from left anterior perianal skin to anterolateral anal wall with internal opening at 1–2 o'clock position was noted, involving lower sphincter about 7mms deep to anal verge with mild intersphincteric collection. No evidence of deep collection in the para rectal region.


SIDDHI DIAGNOSTICS
GIRISH SCAN CENTRE

REPORT: (ENDOANAL AND PERINEAL ULTRASONOGRAPHY)

There is a broad fistula extending from left anterior perianal skin opening to antero-lateral anal wall.

Internal opening is at 1-2 o'clock position through the lower part of sphincter about 7mms deep to anal verge.

Anal canal is normal in length and diameter.

There is no intersphincteric collection at the time of scan.

No evidence of deep collection in the para rectal region.

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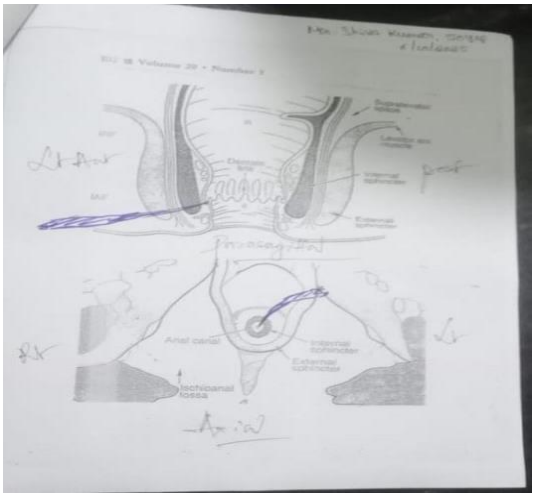


Treatment

The patient was managed with a dual modality approach comprising fistulotomy followed by Ksharasutra therapy under spinal anesthesia. Ksharasutra was changed at weekly intervals until complete excision of the fistulous tract was achieved.

Pre-operative Management

Date: 7th October 2025

- Written informed consent was obtained
- Local part preparation was done
- Nil per oral (NPO) advised from 10:00 PM
- Inj. Tetanus Toxoid 0.5 ml IM administered
- Proctoclytic enema given
- Inj. Monocef 1 g IV
- Inj. Metrogyl 100 ml IV
- Inj. Pan 40 mg IV
- Inj. Emeset 4 mg IV
- Intravenous fluids – Ringer Lactate and Normal Saline

All medications were administered one hour prior to shifting the patient to the operation theatre.

Operative Procedure

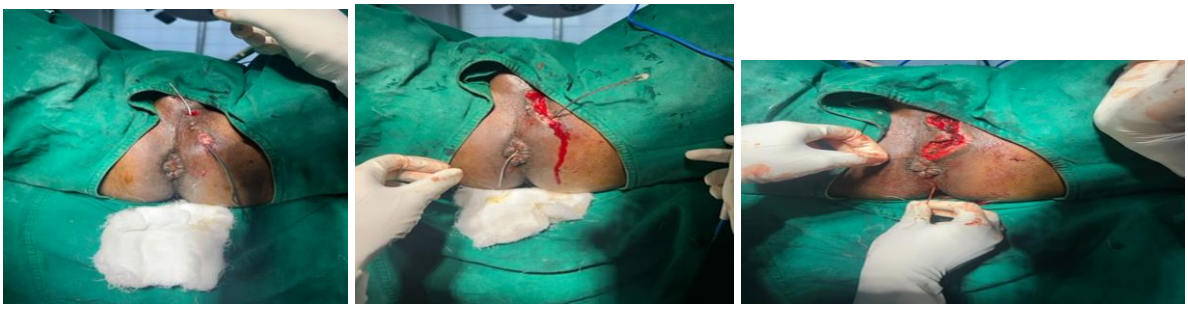
Date: 8th October 2025

Under aseptic precautions and spinal anesthesia, the patient was placed in the lithotomy position. Part painting and draping were done. On inspection, the external opening was noted

just below the left scrotal base. Per rectal examination revealed an internal opening at the 2 o'clock position.

A slit proctoscope was introduced to visualize the internal opening. Probing was done from the external opening towards the internal opening through the path of least resistance. The fistulous tract was identified and fistulotomy was performed. following which primary threading was done.

Dressing was applied. The patient tolerated the procedure well and was shifted to the post-operative ward in a hemodynamically stable condition.



Post-operative Management

From 8th October 2025

- NPO for 8 hours
- Foot-end elevation for 4 hours
- IV fluids (RL, NS) at 100 ml/hour
- Inj. Emeset 4 mg IV SOS
- Inj. Monocef 1 g IV BD
- Inj. Pan 40 mg IV BD
- Inj. Metrogyl 100 ml IV BD
- Inj. Dynapar AQ IM SOS
- Inj. Tramadol 1 amp in 100 ml NS IV at bedtime

Post-operative Course and Follow-up.

Date	Treatment Given	Observation
08/10/2025 – 10/10/2025	Inj. Monocef 1 g IV BD Inj. Metrogyl 100 ml IV BD Inj. Pan 40 mg IV BD Inj. Dynapar AQ IM SOS Tab Triphala Guggulu 2-0-2 (A/F) Tab Gandhaka Rasayana 1-1-1 (A/F) Tab Anuloma DS 0-0-2 (A/F)	Pain present at operated perianal site
11/10/2025 –	Tab Monocef-O 200 mg BD (A/F) Tab Pan 40 mg 1-	Pain and pus discharge

17/10/2025	0-1 (B/F) Tab Zerodol-P 1-0-1 for 3 days Tab Triphala Guggulu 2-0-2 Tab Gandhaka Rasayana 1-1-1 Tab Anuloma DS 0-0-2 for 7 days **Primary thread changed to Chitraka Ksharasutra on 17/10/2025**	reduced Track length ≈ 2 cm
18/10/2025 – 25/10/2025	Tab Triphala Guggulu 2-0-2 Tab Gandhaka Rasayana 1-1-1 Tab Anuloma DS 0-0-2 **Chitraka Ksharasutra changed on 25/10/2025**	Further reduction in pain and discharge Track length ≈ 1.5 cm
26/10/2025 – 01/11/2025	Tab Triphala Guggulu 2-0-2 Tab Gandhaka Rasayana 1-1-1 Tab Anuloma DS 0-0-2 **Chitraka Ksharasutra changed on 01/11/2025**	Continued reduction in symptoms Track length ≈ 1.2 cm
02/11/2025 – 08/11/2025	Tab Triphala Guggulu 2-0-2 Tab Gandhaka Rasayana 1-1-1 Tab Anuloma DS 0-0-1 **Chitraka Ksharasutra changed on 08/11/2025**	Minimal pain and discharge Track length ≈ 0.7 cm
09/11/2025 – 15/11/2025	Tab Triphala Guggulu 2-0-2 Tab Gandhaka Rasayana 1-1-1 Tab Anuloma DS 0-0-1 for 7 days	Pain and discharge almost absent Track length ≈ 0.2 cm

Table 1: Assessment of Symptoms and Operated Wound.

Date	Pain	Pus Discharge	Tenderness	Operated Wound
08/10/2025 – 10/10/2025	+++	+++	+++	+++
11/10/2025 – 17/10/2025	+++	++	+++	+++
18/10/2025 – 25/10/2025	++	+	++	++
26/10/2025 – 01/11/2025	++	+	++	++
02/11/2025 – 08/11/2025	+	–	+	+
09/11/2025 – 15/11/2025	–	–	–	+

Assessment of Fistulous Tract Healing

Table 2: Length of Tract After Subsequent Change of Ksharasutra.

Date	Observation
20/11/2025	Fistulous tract excised completely followed by application of *Apamarga Kshara*. Mild tenderness with serous discharge noted.
25/11/2025	Complete healing of the tract observed with formation of a healthy scar.

Outcome and Follow-up

The patient tolerated the procedure well and showed progressive healing. Pain and discharge reduced significantly. Length of the tract reduced with subsequent Ksharasutra changes. No

post-operative complications were observed during hospital stay. Follow-up showed satisfactory wound healing.

DISCUSSION

Bhagandara is described by Acharya Sushruta as one of the *Ashtamahagada* due to its chronic nature, complex tract formation, and high recurrence. The principles of *Ekadashopakrama* and *Shastra Karma* advocated for *Bhagandara* management form the basis for combining surgical and parasurgical interventions. In the present case, partial fistulotomy followed by *Ksharasutra* therapy was adopted to ensure effective drainage, tract excision, and simultaneous healing.

The increasing incidence of fistula-in-ano in modern times is associated with sedentary lifestyle, prolonged sitting, faulty dietary habits, and systemic disorders such as diabetes mellitus, all of which impair wound healing. *Ksharasutra* therapy is recognized as a gold-standard parasurgical procedure due to its sphincter-preserving action and low recurrence rate. *Chitraka Ksharasutra*, prepared using *Snuhi Ksheera*, *Chitraka Kshara*, and *Haridra Churna*, possesses *Chedana*, *Bhedana*, *Lekhana*, and *Tridoshaghna* properties, enabling chemical debridement, controlled cutting of the tract, and promotion of healthy granulation tissue.

Conventional surgical procedures like fistulotomy, fistulectomy, and seton placement are associated with higher recurrence and risk of sphincter damage in complex fistulae. Partial fistulotomy reduces tract length and ensures adequate drainage, while *Chitraka Ksharasutra* facilitates gradual division and healing of the remaining tract at the sphincter level, thereby preserving continence and shortening healing time.

In the above-presented case, the combined approach of partial fistulotomy followed by *Chitraka Ksharasutra* therapy resulted in progressive reduction in pain and discharge, complete healing of the fistulous tract, and absence of recurrence during follow-up. Adherence to *Pathya–Apathya* measures further supported wound healing and helped prevent relapse

CONCLUSION

This case demonstrates that fistulotomy followed by Ksharasutra therapy offers a rational and effective treatment strategy for managing complex fistulous tracts. The approach ensures

adequate drainage, controlled tract excision, and gradual healing while maintaining patient comfort and safety. Regular monitoring and timely replacement of Ksharasutra were crucial in achieving complete recovery. This integrative protocol may be considered a reliable therapeutic option in similar cases encountered in Shalya Tantra practice.

Patient Consent

Written informed consent was obtained from the patient for publication of this case report.

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