

## AYURVEDA-BASED PARIKARTIKA MANAGEMENT WSR FISSURE IN ANO: A CASE REPORT

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### KEYWORDS

### ABSTRACT

**Introduction:** Fissure in ano, or Parikartika in Ayurveda, is a painful anorectal condition. A key feature of this case is the use of Shatadhauta Gruta (medicated ghee) washed with Nirgundi Kashay instead of water.

**Clinical findings:** The patient presented with a burning sensation, severe pain in anal region during and after bowel movements, and blood-stained stools.

**Diagnosis:** Clinical examination confirmed an acute fissure-in-Ano a longitudinal ulcer at the 6 o'clock position.

**Interventions:** Treatment included both external and internal Ayurvedic interventions: warm sitz baths followed by the application of nirguNDI patra kaShAya Sodhit Shatadhaut GRuta (NPKSSG) externally, along with herbal formulations for internal balance.

**Outcome:** Remarkable improvement was observed within 12 days, with no recurrence at 3 and 6 months.

**Conclusion:** NPKSSG proved to be an effective treatment for Parikartika, demonstrating properties like pain relief, wound cleansing, and healing. Its unique formulation enhances its efficacy in managing fissure in Ano effectively

## INTRODUCTION

Fissure in Ano is the condition that is most common in the anorectal region<sup>[1]</sup>. An anal fissure (WHO-ICD-10 code- K60.0) also termed as fissure-in-Ano, is a linear or oval painful tear/defect in the distal anal canal, starting just below the dentate line, extending to the anal verge<sup>[2]</sup>. Lockhart-Mummery gave the first description of it in 1934<sup>[3][4]</sup>. Anorectal fissure, characterized by a painful sensation to skin a 'split or crack' poses significant hindrance to daily activities because to poor lifestyle choices and food habits. The condition, known as *parikartika*<sup>[11]</sup> in Ayurvedic science, manifests as an intense sensation of the anal canal being cut with scissors<sup>[5]</sup>. Anal fissures are typically caused by hard stools, constipation, or trauma and increased tone of the anal sphincter, with symptoms that persist for more than six weeks<sup>[6]</sup>. Any age group can develop anal fissures, but children and middle-aged adults are the most common age groups to experience them. Gender is not impacted differently<sup>[6]</sup>. The yearly incidence varied greatly by age, ranging from 0.05% in children aged 6–17 to 0.18% in patients aged 25–34. Overall, the incidence was 0.11% (1.1 instances per 1000 person-years)<sup>[7]</sup>. 90.8 percent of individuals with anal fissures report having pain, making it the most prevalent symptom<sup>[3]</sup>. Another typical sign of anal fissures that affects 71.4% of individuals is bleeding<sup>[3]</sup>. Management of *parikartika* necessitates consideration of therapeutic modalities that facilitate ulcer healing and mitigate the searing and burning pain associated with the ailment. Ayurvedic medicine offers various methodologies for managing fissure-in-ano, including *sneha-bastiH* (Oil enema therapy), *avagAhasvedaH* (medicated lukewarm water sitz bath) and *lepa* (medicated ointments). *parikartika* characterized by a painful longitudinal ulcer, can be classified as *sadyovraNaH* (NAMASTE PORTAL code- K-2.1), requiring medication compositions possessing *vraNaropaNam* qualities for effective management<sup>[8]</sup>. This case is unique because the preparation, i.e. *nirguNDI patra kaShAya Sodhit Shatadhaut GRuta(NPKSSG)*, shows effects on pain as well as on wound healing.

## PATIENT INFORMATION

A 25-year-old male (50 kg, 155 cm) in the IT sector visited the Shalyatantra outpatient department on August 2, 2023. He reported constipation, pain, and burning in the perianal region for seven days. Initially mild pain and would alleviate within 15 minutes post-defecation, the pain intensified over three days, lasting up to 30 minutes post-defecation, with blood streaks on the stool. Despite taking analgesics and using 2% xylocaine jelly, relief was temporary, with symptoms returning after the medication wore off.

No prior history of anal fissures or other digestive problems. No history of inflammatory bowel diseases.

### Family history:

No any family history of gastrointestinal disorders, including anal fissures/haemorrhoids.

No history of mental health conditions that could affect coping or stress levels.

### Past interventions with outcomes:

In June 2023, the patient had history of similar complaints like pain in anal region during and after defecation, constipation, for this he took allopathic treatment and he got relief for some time and again after 2 months he visited our Shalyatantra OPD on 2<sup>nd</sup> August 2023.

### Clinical findings:

During the general physical examination, blood pressure was 130/70 mmHg, pulse rate was 84/min. He showed no signs of icterus, cyanosis, clubbing, or pallor during systemic examination. The respiratory system, cardiovascular and central nervous system showed no anomalies. Additional evaluation involved the examination of particular parameters such as, the patient was found to have *Pittaja-vata* bodily constitution with *madhyama satvas* (medium psychic state); It was determined that the ability to digest (*Agni*) was weak, Pulse (*Nadi*) (reveal a *Vata-Pittaja* (impairment in *vata-pitta*) state and the tongue seem coated (*sa-ama*). The

digestive system (*koShThaH*) was determined to be *krUra* (hard); The urine was seen to be a pale-yellow colour, four to five times a day, without any burning sensation.

*Vata* and *Pitta dosha* imbalances were among the factors that contributed to the patient's illness, abnormalities in the body's tissues (*dhAtu*) including *tvak*, *rakta*, *mAMsa*. The excretory product involved was *purIsha* (stool) due to constipation.

During rectal examination, inspection revealed the presence of a longitudinal ulcer with an indurated margin located in the lower segment of the anal canal at the 6 o'clock position. Palpation involved assessing the hypertonicity of the anal sphincter using digital rectal examination with the little finger.

**Timeline:**

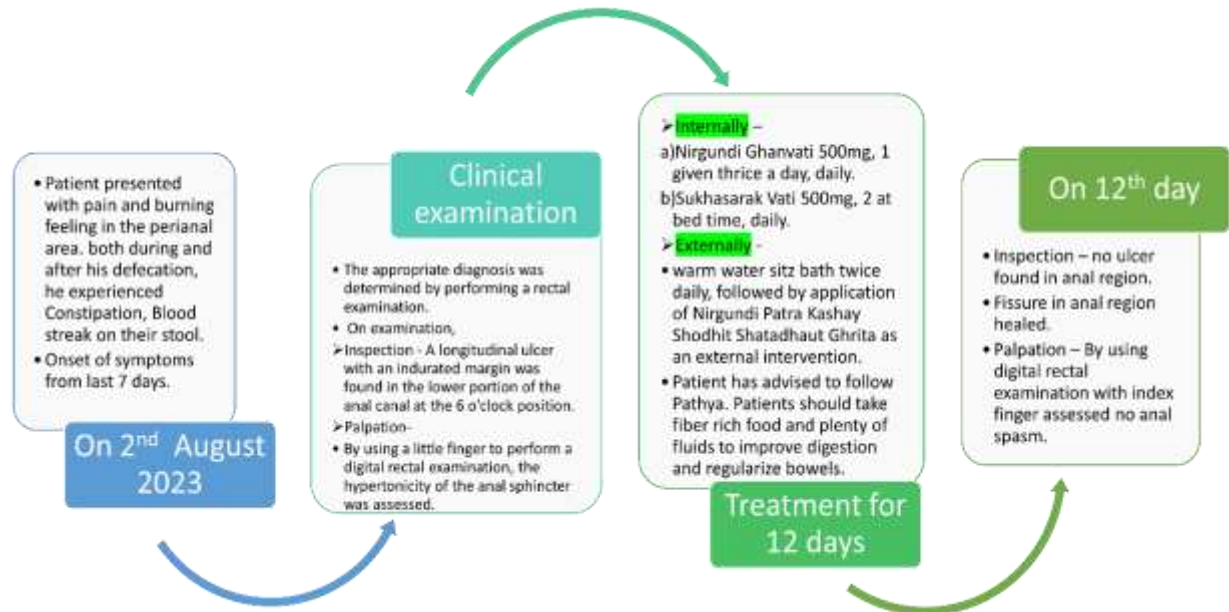


Figure no.1: Timeline of the case

**DIAGNOSTIC ASSESSMENT:**

After a thorough assessment and local examination, anal fissure was diagnosed. To evaluate treatment impact, all parameters were considered before, during, and after follow-up.

Subjective criteria included *gudA raktasrAva* (bleeding), *vibandhaH*(constipation), and sphincter tone, while objective parameters included ulcer size and *gudASUla* (anal pain), as detailed in Figure no.2.

Assessment criteria		Gradation
<b>Gudagata Raktasrava</b>	No bleeding	0
	Mild (Along with stool)	1
	Moderate (6-8 drops)	2
	Severe (More than 8 drops)	3
<b>Vibandha</b>	No (Passes stool regularly without difficulty)	0
	Mild (Passes stool regularly with difficulty)	1
	Moderate (Passes hard stools irregularly with difficulty)	2
	Severe (Passes pellet like stools once in a week with difficulty)	3
<b>Sphincter Tone</b>	Normal	0
	Increased sphincter tone	1
<b>Size Of Ulcer</b>	Healed ulcer	0
	1-2 mm	1
	2-4 mm	2
	>4 mm	3
<b>Gudashoola</b>	Based on VAS	1-10

Figure no.2 (Criteria for assessment and gradation of subjective and objective parameters)

### THERAPEUTIC INTERVENTION:

After a thorough evaluation, a tailored treatment plan was created for the patient, combining internal and external therapies (see figure no.3 and 4).

Figure no.3 (Internal medication)

Medication	Dosage	Duration
<b>Nirgundi Ghanvati (500mg)</b>	1 twice daily	12 days
<b>Sukhsarak Vati (500mg)</b>	2 at bed time	12 days

Figure no.4 (External intervention)

Intervention		Duration
Warm water sitz bath	Twice daily for 15 minutes	12 days
Nirgundi Patra Kashay	Twice daily	12 days
Sodhit Shatadhaut Ghrita		

FOLLOW UP AND OUTCOMES WITH INTERVENTION: Figure no.5

Date/Day	Symptoms	Local examination	Treatment	Visit summary
Day 1 02 August 2023	Both during and after his defecation, he experienced pain and a burning feeling in the perianal area. Constipation. Blood streak on their stool. Onset of symptoms from last 7 days.	The appropriate diagnosis was determined by performing a rectal examination.  On examination, Inspection - A longitudinal ulcer with an indurated margin was found in the lower portion of the anal canal at the 6 o'clock position. Palpation- By using a little finger to perform a digital rectal examination, the hypertonicity of the anal sphincter was assessed.	<ul style="list-style-type: none"> <li>Internally –</li> <li>a) Nirgundi Ghanyati 1 given twice a day, daily.</li> <li>b) Sekhasarak Vati 2 at bed time, daily.</li> <li>Externally -</li> </ul> warm water sitz bath twice daily, followed by application of Nirgundi Patra Kashay Sodhit Shatadhaut Ghrita as an external intervention. <ul style="list-style-type: none"> <li>Patient has advised to follow Pathya. Patients should take fiber rich food and plenty of fluids to improve digestion and regularize bowels.</li> </ul>	Received allopathic treatment on June 2023. But after 2 months again patient complains of similar symptoms. But rather than having the suggested operation, the patient made the personal choice to pursue Ayurvedic treatment.
Day 5 06 August 2023	Mild pain and burning feeling in anal region during defecation. Stool passes easily. No blood streak on stool.	Inspection – A longitudinal ulcer size reduced at 6 o'clock On palpation- By using digital rectal examination with index finger, the mild anal spasm present.	Same as above.	The patient reported feeling well throughout the visit, and overall, their complaints were somewhat modest.  Patient can tolerate daily routine.
Day 10 11 August 2023	Pain and burning sensation in anal region reduced after defecation. Stool passes easily. No blood streak on stool.	Inspection – longitudinal ulcer healed at 6 o'clock. On palpation- By using digital rectal examination with index finger assessed no anal spasm.	Same as above.	The patient expressed happiness and satisfaction with the results that too without surgery.
Day 12 13 August 2023	No pain and burning sensation in anal region during and after defecation. Stool passes easily. No blood streak on stool.	Inspection – no ulcer found in anal region. Fissure in anal region healed. Palpation – By using digital rectal examination with index finger assessed no anal spasm.	Patient is asked to follow Pathyapathya and advised to avoid food or things that make him constipated.	The patient expressed happiness and satisfaction with the results that too without surgery. Periodic follow-ups every third month were recommended. The purpose of this routine examination is to track the patient's anal sphincter tone. It was suggested that a follow-up appointment be made in three months.

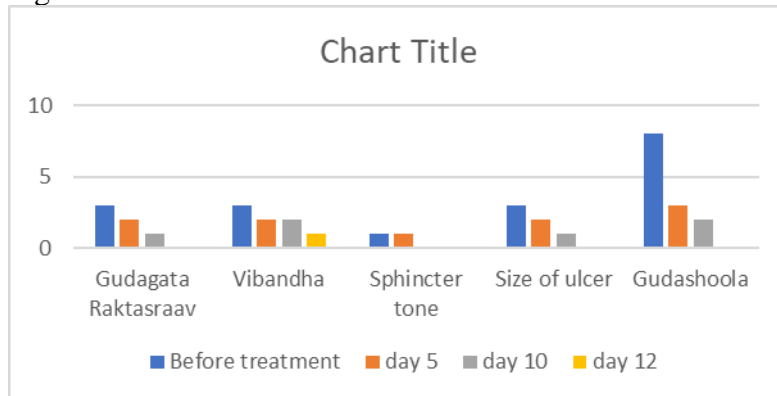
Figure no. 5 (Follow up and outcomes with intervention)

In this instance, significant relief was noted in both the subjective and objective metrics. By the twelfth day, the patient reported complete pain relief in anal region and had no symptoms, got complete relief in Gudagata Raktasrava, size of ulcer reduced, having normal sphincter tone, relieved constipation. No adverse effect noted during treatment.

The primary goal of the therapy was to evaluate Shamana aushadha's impact and to observe the newly prepared nirguNDI patra kaShAya Sodhit Shatadhaut GRuta's impact. Result summarized in figure no.6 and graph no.1.

Assessment criteria	Before treatment	On 5 <sup>th</sup> day	On 10 <sup>th</sup> day	On 12 <sup>th</sup> day
Gudagata Raktasraav	3	2	1	0
Vibandh	3	2	2	1
Sphincter tone	1	1	0	0
Size of ulcer	3	2	1	0
Gudashoola	8	3	2	0

Figure no.6- Result



Graph no.1- Result

It was suggested to the patient have a visit to the hospital every three months. The three-months and 6 months follow-up period went without incident.

## DISCUSSION:

Parikartika, characterized by painful longitudinal ulcers in the anal region, is classified as a sadyovraNa (fresh wound)<sup>[8]</sup>. Treatment focuses on medications that promote healing while alleviating pain and burning sensations, often leading to rapid symptom relief within five days and complete healing in approximately 12 days.

### Treatment Modalities

Nirgundi Patra Kashay Shodhit Shatadhaut Ghrita- is recognized for its *vedana SamaM* (pain-relieving), *vraNa Sodhana* (cleansing)<sup>[9]</sup>, and *vraNaropaNam* (healing)<sup>[9]</sup> properties. According to Ayurved, *nirguNDI* due to its *tlkShNa guNa* and *uShNa vIrya* pacify vitiated *vAta* and *SothaHhara*<sup>[9]</sup>, *vedanAsthApana*<sup>[9]</sup>. Its flavonoids and alkaloids provide analgesic, anti-

inflammatory, and wound-healing effects, facilitating granulation tissue formation essential for ulcer healing. Shatadhaut Ghrita and Nirgundi Patra Kashay both shows action like wound healing as well as analgesic effect which is required in fissure in ano<sup>[15]</sup>.

Nirgundi Ghan Vati- promotes pAcana(digestion), srotasAM SuddhiH, rakta Sodhana(blood purification), and alleviates spasms, enhancing circulation in the anorectal region.

Sukhasarak Vati- addresses constipation, a contributing factor in fissure development. It combines Citrullus colocynthis and Terminalia chebula to improve digestion and bowel tone, allowing the ulcer time to heal.

Ushnajala Avagaha Sweda(Hot Sitz Bath)- promotes relaxation of the anal sphincter and increases blood flow, enhancing metabolic activity and promoting healing through improved oxygen and nutrient delivery to the affected area<sup>[10]</sup>.

Before treatment, the patient had moderate bleeding per anum (>8 drops) [Figure no.7]. By day 5, it was mild; by days 10 and 12, bleeding stopped. Pain decreased significantly, with no pain by day 12. Size of ulcer before treatment was 4mm [Figure no.8]. After application of Nigundi Patra Kashay Shodhit Shatadhaut Ghrita [Figure no.9], On 5<sup>th</sup> day, it was 2mm [Figure no.10]. On 10<sup>th</sup> day, it was less than 1mm [Figure no.11]. On 12<sup>th</sup> day, ulcer completely healed. [Figure no.12].

Blood seeping through the stool ceased, and burning sensations diminished after day 5. Full healing was noted by day 10.



**Figure no.7**  
**Before treatment**



**Figure no.8**

**Before treatment**  
**Size of ulcer approx 4mm**



**Figure no.9**

**Application of Nirgundi Patra Kashay Shodhit Shatadhaut Ghrita**



**Figure no.10**

**On 5<sup>th</sup> day of application of Ghrita**





**Figure no.11**  
**On 10<sup>th</sup> day of application of Ghritha**



**Figure no.12**  
**On 12<sup>th</sup> day of application of Ghritha**

## **CONCLUSION**

This comprehensive Ayurvedic approach effectively addresses Parikartika, leading to rapid symptom relief and healing. The combination of various formulations provides a balanced strategy that promotes healing in the anorectal region. This case study highlights the need for further clinical research to confirm the efficacy of these Ayurvedic remedies, particularly the new formulation of Nirgundi Patra Kashay Shodhit Shatadhaut Ghritha, which has demonstrated quicker pain relief and healing.

## **PATIENT PERSPECTIVE**

"After being diagnosed with fissure in ano and facing difficulty in daily routine, I decided to seek Ayurvedic treatment in August 2023 as an alternative to a surgery. I started to see improvements after starting a customized Ayurvedic program that included dietary changes and Ayurvedic medications. My medical illnesses were treated by Ayurveda's holistic

approach, which also relieved my mental tension. I am appreciative of my health's steady progress without side effects.”

#### **INFORMED CONSENT**

In writing, the patient gave their informed consent before to starting the suggested Ayurvedic treatment, indicating that they understood it. Furthermore, formal informed agreement was obtained from the patient for the release of their clinical information.

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#### **AUTHORS' CONTRIBUTION STATEMENT:**

Author 1 conceived of the presented idea and developed the theoretical formalism. Author 1 & 7 contributed to drug preparation and carried out the experiment. Author 1 & 7 wrote the manuscript.

Author 2, 3, 4, 5, 6 and 8 analysed the data, helped in editing manuscript and contributed to the interpretation of the results.

All authors discussed the results and contributed to the final manuscript and provided critical feedback and helped shape the research, analysis and manuscript.

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#### **REFERENCES**

1. Beaty JS, Shashidharan M. Anal fissure. Clinics in Colon and Rectal Surgery. 2016;29(1):30–7. doi:10.1055/s-0035-1570390.
2. Gardner IH, Siddharthan RV, Tsikitis VL. Benign anorectal disease: hemorrhoids, fissures, and fistulas. Ann Gastroenterol. 2020 Jan;33(1):9.
3. Hananel N, Gordon PH. Re-examination of clinical manifestations and response to therapy of fissure-in-ano. Dis Colon Rectum. 1997 Feb;40(2):229-33. doi:10.1007/BF02054993. PMID: 9075762.
4. Lockhart-Mummery JP. Diseases of the rectum and colon and their surgical treatment. 1934.
5. Kumar P, Sijoria KK. Diagnosis and management of anorectal diseases. 1st ed. Delhi: Chaukhamba Sanskrit Pratishthan; 2002. p. 179.
6. Jahnnny B, Ashurst JV. Anal fissures. [Updated 2022 Nov 14]. In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2024 Jan-. Available from: <https://www.ncbi.nlm.nih.gov/books/NBK526063/>
7. Mapel DW, Schum M, Von Worley A. The epidemiology and treatment of anal fissures in a population-based cohort. BMC Gastroenterol. 2014 Jul 16;14:129. doi:10.1186/1471-230X-14-129. PMID: 25027411; PMCID: PMC4109752.
8. Patel JR, Dudhamal TS. A comparative clinical study of Yashtimadhu Ghrita and lignocaine–nifedipine ointment in the management of Parikartika (acute fissure in ano). Ayu. 2017;38:46-51.
9. Sharma AP. Dravyaguna Vigyana. Dwitiya Bhaga. Nirgundi. Varanasi: Choukhambha Bharati Prakashan; p. 66-67.
10. Sreerag MV, Mukund Dhule. Ayurvedic management of Parikarthika (acute fissure in ano) – A case study. J Pharm Res Int. 2021;33(43B):160-3.
11. NAMASTE PORTAL. Parikartika term id- 4647, code- SAT-D.4646.