

Review Article

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“PARIKARTIKA (FISSURE-IN-ANO): AYURVEDIC AND MODERN MANAGEMENT”**Dr. Abhay Gandhi¹****AFFILIATIONS:**

1. Director, Ira Consultancy & Research Organisation, Bhosari, Pune, Maharashtra 411026

CORRESPONDENCE:

Dr. Abhay Gandhi

EMAIL ID: director@icro.co.in

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ABSTRACT

Background: Anal fissure is a painful tear in the anoderm that affects people of all ages and is one of the most common anorectal conditions seen in surgical practice; a population-based study estimated a lifetime incidence of about 8%^[1]. Ayurveda describes a similar condition, Parikartika, characterised by cutting pain in the anal region, both as a disease in its own right and as a complication of improper purgation or enema. **Objective:** To review the Ayurvedic concept and management of Parikartika and compare it with the modern understanding and evidence-based management of anal fissure. **Methods:** Narrative review of classical Ayurvedic texts, clinical practice guidelines, Cochrane reviews and clinical trials, including an Ayurvedic randomised trial protocol. **Results:** Classical texts describe Parikartika as cutting or sawing pain in the anus, associated with Vata aggravation, hard stools and improper Panchakarma procedures, and treat it with oleation, soothing enemas, ghee-based applications, sitz baths and diet. Modern pathophysiology attributes chronic fissure to internal sphincter hypertonia and local ischaemia. Guidelines recommend fibre, sitz baths and topical analgesics first, then topical nitrates or calcium channel blockers, botulinum toxin and, for refractory fissures, lateral internal sphincterotomy. Ayurvedic measures such as sitz baths, stool softening and Jatyadi Taila application overlap with first-line conservative care, and a randomised trial comparing an Ayurvedic protocol with diltiazem gel is under way. **Conclusion:** Ayurvedic management of Parikartika aligns closely with conservative fissure care. Its specific formulations need evaluation in controlled trials against standard first-line treatments.

KEYWORDS: Parikartika; anal fissure; fissure-in-ano; Jatyadi Taila; Matra Basti; sitz bath; lateral internal sphincterotomy

INTRODUCTION

An anal fissure is a longitudinal tear in the anoderm distal to the dentate line, usually in the posterior midline. Acute fissures often heal with conservative care, but some become chronic, with features such as a sentinel tag, hypertrophied anal papilla and exposed internal sphincter fibres^[2,3]. Patients experience severe pain during and after defecation, often with bright red bleeding, which leads to fear of defecation, constipation and a vicious cycle.

Chronic anal fissure is associated with hypertonia of the internal anal sphincter and reduced blood flow to the posterior anoderm^[4,5]. Treatment aims to relax the sphincter and improve blood flow, allowing the fissure to heal. Options include topical nitrates and calcium channel blockers, botulinum toxin injection and lateral internal sphincterotomy, which has the highest healing rates but carries a small risk of incontinence^[2,6,7].

In Ayurveda, Parikartika (from Pari, around, and Kartana, cutting) describes cutting pain around the anus. It is described both as an independent condition and as a complication (Vyapad) of improperly performed Virechana (purgation) and Basti (enema)^[8,9]. This review compares the Ayurvedic and modern understanding of the condition and their approaches to treatment.

METHODS

Classical sources were Charaka Samhita (Siddhi Sthana 6 and 7) and Sushruta Samhita (Chikitsa Sthana 34)^[8,9]. Modern literature was identified through PubMed, the Cochrane Library and Google Scholar using anal fissure, fissure-in-ano, sphincterotomy, glyceryl trinitrate, diltiazem, botulinum toxin, sitz bath, Parikartika and Jatyadi. This is a narrative review.

AYURVEDIC CONCEPT OF PARIKARTIKA

Description

Parikartika is characterised by cutting or sawing pain in the anus, sometimes extending to the umbilicus, bladder and penis, with difficulty in passing flatus and stools, and sometimes bleeding^[8,9].

Causes

Classical texts describe Parikartika:

- **As a complication of Virechana:** when strong purgatives are given to a person with mild digestive fire, dry body or hard bowels, they

irritate and injure the anal region^[8].

- **As a complication of Basti:** when an enema containing sharp, hot or irritant substances, or in excessive quantity, is given improperly^[8,9].
- **As an independent condition:** due to passage of hard stools, dry diet, suppression of natural urges, excessive straining and Vata aggravation.

Pathogenesis

Vata, especially Apana Vata, which governs elimination, is aggravated by dryness and hard stools. The anal mucosa becomes dry and tears; Pitta involvement may add burning and bleeding. The process corresponds well with the modern understanding that hard stools cause the initial tear and that sphincter spasm and ischaemia prevent healing^[4,5].

Classical treatment

Charaka and Sushruta recommend^[8,9]:

- **Oleation:** oral ghee and oil, and oil application to the anus.
- **Picchha Basti and Anuvasana Basti:** soothing, slimy or oily enemas (for example with Yashtimadhu, milk and ghee) to lubricate and heal the anal canal.
- **Sitz bath (Avagaha Sweda):** sitting in warm decoctions or milk.
- **Topical applications:** ghee, Yashtimadhu, honey and healing pastes.
- **Diet:** soft, unctuous, easily digestible food, milk and ghee; avoidance of dry, hot and spicy food.
- **Laxatives:** gentle laxatives such as Triphala or Isabgol (psyllium husk) to soften stools.

Modern Ayurvedic surgical practice uses Jatyadi Taila or Jatyadi Ghrita locally, Matra Basti with Jatyadi Taila or Yashtimadhu Taila, sitz baths with Panchavalkala or Triphala decoction, and internal medicines such as Triphala Guggulu and Abhayarishta.

MODERN UNDERSTANDING AND MANAGEMENT

Pathophysiology

Studies have shown that patients with chronic anal fissure have elevated resting anal pressure due to internal sphincter hypertonia, and that anodermal blood flow at the posterior midline is inversely related to anal pressure^[4]. Anatomical studies have shown that the posterior commissure is relatively poorly perfused by branches of the inferior rectal artery^[5].

These findings support the view that chronic fissure is an ischaemic ulcer maintained by sphincter spasm.

Conservative treatment

Guidelines recommend first-line conservative measures for acute and chronic fissures, including fibre supplements, adequate fluids, sitz baths and topical analgesics^[2,3]. In a randomised study of first episodes of acute fissure, warm sitz baths plus bran healed more fissures and prevented more recurrences than lignocaine or hydrocortisone ointments^[10]. However, a later randomised study of acute fissures found that adding sitz baths to standard treatment did not clearly improve healing compared with no sitz baths^[11], so their main value may be symptomatic comfort.

Pharmacological sphincter relaxation

Topical nitrates (such as glyceryl trinitrate) and calcium channel blockers (such as diltiazem and nifedipine) relax the internal sphincter and improve blood flow. In a randomised, placebo-controlled trial, glyceryl trinitrate ointment healed more chronic fissures than placebo^[12]. A Cochrane review found that topical nitrates were marginally better than placebo for healing, with frequent headaches as a side effect, and that calcium channel blockers were as effective as nitrates with fewer side effects^[6]. Botulinum toxin injection is another option; in a randomised trial in chronic fissure, botulinum toxin healed more fissures than topical nitroglycerin^[13].

Surgery

Lateral internal sphincterotomy is the most effective treatment for chronic fissure, with healing rates well above those of medical treatments, but it carries a small risk of incontinence, especially to flatus^[7]. Guidelines recommend it for fissures that fail medical treatment, with careful patient selection^[2,3]. Anal dilatation is no longer recommended because of a higher risk of incontinence^[7].

COMPARISON OF AYURVEDIC AND MODERN APPROACHES

Table 1: Comparison of Ayurvedic and modern approaches to Parikartika

Treatment goal	Ayurvedic measure	Modern equivalent
Soften stools, prevent straining	Ghee, unctuous diet, Triphala, Isabgol	Fibre supplements, laxatives
Relax sphincter, relieve pain	Avagaha Sweda (warm sitz bath), oil application, Anuvasana Basti	Warm sitz baths, topical nitrates or calcium channel blockers
Promote healing of the fissure	Jatyadi Taila or Ghrita, Yashtimadhu,	Topical agents; botulinum toxin;

MATRA BASTI IN PARIKARTIKA

Matra Basti is a small-dose oil enema (commonly 30 to 60 ml of warm medicated oil) that can be given daily without the preparation required for larger enemas. In Parikartika, it is used to lubricate the anal canal, soften stools, relax the sphincter and promote healing of the fissure. Commonly used oils include Jatyadi Taila, Yashtimadhu Taila and Sahacharadi Taila.

The proposed mechanism is plausible: warm oil coats the anoderm, reduces friction during defecation and may have a local relaxing effect on the sphincter, similar to the effect of warm sitz baths. Medicated oils may add anti-inflammatory and wound-healing effects. A typical protocol involves administering the enema after the evening meal or after defecation, with the patient lying on the left side, retaining the oil as long as comfortable, for 7 to 21 days.

Points of caution include gentle insertion of a lubricated, soft catheter to avoid further trauma to an acutely painful fissure, and avoidance in patients with severe pain or anal stenosis until pain is controlled. Topical anaesthetic application before insertion may improve tolerance. Matra Basti has not been compared with topical diltiazem or nitrates in controlled trials, and such a comparison would be clinically useful.

CHRONIC FISSURE AND ITS ASSOCIATED FEATURES

Chronic fissures often have a sentinel pile (skin tag) and a hypertrophied anal papilla. In Ayurvedic surgical practice, these are sometimes removed by Kshara Karma or excision together with treatment of the fissure, analogous to fissurectomy in modern practice. Any surgical intervention on the anal canal should take care to protect the internal sphincter and should be accompanied by measures to reduce sphincter tone, otherwise the fissure may recur.

Treatment goal	Ayurvedic measure	Modern equivalent
	honey, Picchha Basti	sphincterotomy for refractory cases
Prevent recurrence	Regular diet, avoidance of dry foods, routine	Long-term fibre and bowel habits
Prevent iatrogenic fissure	Correct dosing and selection in Virechana and Basti	Careful use of laxatives and enemas

The overlap is substantial. The main difference is that modern medicine has specific pharmacological agents to reduce sphincter tone and a surgical option for refractory cases, while Ayurveda relies on oleation, heat and herbal healing agents.

AYURVEDIC CLINICAL EVIDENCE

Many Ayurveda clinical studies report improvement in pain, bleeding and healing with Jatyadi Taila, Matra Basti, sitz baths and oral formulations, but most are small and uncontrolled. Experimental work shows that Jatyadi Taila improves wound breaking strength and collagen deposition in rats^[14].

A randomised controlled trial is currently being conducted at a national Ayurveda research institute, comparing an Ayurvedic management protocol (including Jatyadi Taila and Triphala Churna, with sitz baths) with diltiazem gel (with sitz baths) in 90 patients with fissure-in-ano, with follow-up to 112 days and outcomes including healing, recurrence, safety and quality of life^[15]. Results from this trial will provide important comparative evidence.

PRACTICAL INTEGRATED APPROACH

An integrated approach to anal fissure in an Ayurveda surgical clinic could include:

1. **Diagnosis:** gentle inspection to confirm a fissure and exclude other causes, such as Crohn's disease, tuberculosis, malignancy or sexually transmitted infections, particularly for atypical (lateral or multiple) fissures.
2. **Acute fissure:** stool softening with fibre, fluids and Triphala or Isabgol; warm sitz baths two or three times daily; local application of Jatyadi Taila or ghee; avoidance of straining.
3. **Chronic fissure:** add Matra Basti with medicated oil or a topical calcium channel blocker; consider botulinum toxin or surgical referral if not healed after six to eight weeks.
4. **Prevention:** dietary advice, regular bowel habits and caution with strong purgatives.

SAFETY

Ayurvedic measures for fissure are generally safe.

Excessive oil enemas may cause leakage or discomfort. Strong purgatives used in Virechana can themselves cause fissures, as the classical texts warn, so purgation should be avoided or carefully adjusted in patients with anal fissure. Pain that persists despite treatment, atypical fissures, or bleeding with change in bowel habit, especially in older adults, require further investigation.

DISCUSSION

The Ayurvedic description of Parikartika is clinically accurate and its causes, especially hard stools and improper purgation, correspond to modern understanding. Its treatment is centred on lubrication, softening, warmth and healing, which overlaps substantially with modern conservative care. The classical recognition of Parikartika as a complication of Panchakarma procedures is a useful reminder of the need for careful patient selection and dosing.

The main gap in Ayurveda is evidence. The randomised trial now under way, comparing an Ayurvedic protocol with diltiazem, is a welcome step. Further trials should compare specific interventions such as Matra Basti with standard pharmacological treatments for chronic fissure, using healing rate, pain scores, recurrence and continence as outcomes.

CONCLUSION

Parikartika corresponds closely to anal fissure. Ayurvedic management, including oleation, sitz baths, stool softening, Matra Basti and healing applications such as Jatyadi Taila, aligns with first-line conservative care. Pharmacological sphincter relaxation and lateral internal sphincterotomy remain important for chronic fissures that do not heal. Controlled trials of Ayurvedic protocols against standard first-line treatments are needed and one is already under way.

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