

A COMPARATIVE CLINICAL STUDY OF YASHTIMADHU GHRITAMALAHARA AND KARPOORA GHRITA MALAHARA IN THE MANAGEMENT OF PARIKARTIKA WITH REFERENCE TO FISSURE IN ANO

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ABSTRACT

Parikartika is an anorectal disorder marked by cutting and burning anal pain, often radiating to the nabhi, medra, and basti shira, with anila avarodha. It corresponds clinically to fissure-in-ano, a painful linear ulcer extending from below the dentate line to the anal verge, typically associated with constipation, hard stools, pain during and after defecation, and occasional bleeding. Ayurveda describes Parikartika as a complication of improper vasti or virechana and emphasizes nidana parivarjana, correction of constipation, and vata shamana. As ghritha and taila are indicated for vata disorders, ropana ghrithas may be used locally. Sixty confirmed fissure-in-ano patients were randomized into two groups: Group A received Yastimadhu ghritha malahara and Group B Karpooora ghritha malahara daily for seven days. Assessments were done on days 1 and 7, with follow-up until day 42. Both groups improved significantly; however, Group A showed highly significant and superior improvement compared with the moderately significant results in Group B.

KEYWORDS: Parikartika; fissure-in-ano; Yastimadhu ghritha malahara; Karpooora ghritha malahara.

INTRODUCTION

Ayurveda, meaning the “science of life,” is one of the oldest systems of medicine and is often regarded as the mother of healing sciences. Parikartika is an anorectal condition described in Ayurvedic classics. The term is derived from the Sanskrit words Pari (around) and Kartanam (cutting), denoting severe cutting and burning pain around the anus. Sushruta describes it as a painful disorder of guda associated with cutting pain and burning sensation. It is also mentioned in relation to complications of virechana and basti, as a sequel of Vataja Atisara, and in the context of garbhini vyapad by Kashyapa.

The clinical features of Parikartika closely resemble fissure-in-ano or anal fissure in contemporary medicine. An anal fissure is a longitudinal tear or ulcer in the distal anal canal. It is a common painful anorectal disorder, occurring in approximately 1 in 350 adults. Around 90% of fissures occur in the posterior midline, while about 10% occur anteriorly. It affects individuals of all age groups and both sexes.

Sedentary lifestyle, irregular food habits, prolonged sitting, psychological stress, constipation, and passage of hard stool are important contributing factors. From an Ayurvedic perspective, these factors impair Jatharagni, resulting in disturbed digestion, formation of hard stool

(Malabaddhata), and aggravation of Vata, ultimately causing anorectal disorders. Clinically, patients present with severe pain during defecation, burning sensation persisting after defecation, streaks of fresh blood in stool, and a visible linear ulcer or crack around the anal margin.

Modern management includes topical anaesthetics, botulinum toxin injection, anal dilatation, and lateral internal sphincterotomy. Ayurveda offers non-invasive management using ghritha, madhu, tila kalka, and Yashtimadhu preparations. Therefore, this study evaluates Karpooora Ghritha Malahara and Yashtimadhu Ghritha Malahara, mentioned in Bhaishajya Ratnavali under Sadyovrana Chikitsa, for their vrana ropana and shooslaghna effects in Parikartika.

OBJECTIVES

- To review the available literature relating to parikartika mentioned in our classics similarly Fissure in Ano in modern review.
- Prepare karpooora ghritha malahara for the management of parikartika
- Evaluate the effect of karpooora ghritha malahara in the management of parikartika

SAMPLE SIZE ESTIMATION

Patients will The study is strictly confined to the cases of acute anal fissures; hence 60 be collected as per inclusion and exclusion criteria from OPD and IPD of Karnataka Ayurveda Medical College Hospital, Mangalore and from other camps and referrals irrespective of sex and religion and were recruited for the study after getting a written consent. A minimum of 60 patients fulfilling the diagnostic and inclusion criteria of either sex will be selected randomly for the clinical study and assigned into 2 groups.

METHODOLOGY

SOURCE OF DATA

1) Literary source

All the ayurvedic literature, modern medical literature, internet sources about the diseases and journals

2) Drug source

- Drugs needed for preparation of *Karpooora ghritha malahara* and *Yashtimadhu ghritha malahara* will be prepared in Karnataka Ayurveda Medical College Pharmacy as per classical reference.

- Method of preparation of *Karpooora ghritha malahara*

- Medicine prepared according to the method given at *Bhaishajya ratnavali*

- *Shatadauta ghritha* is prepared and the *Karpooora* is powdered and added to it after heating *ghrita*. Then *malahara* base such as bee wax is added and *malahara* is prepared.

3) Sample source - The study is strictly confined to cases of acute anal fissure hence patients will be selected as per inclusion and exclusion criteria from OPD and IPD of Karnataka Ayurveda Medical College and Hospital Mangalore and other camps and referrals.

Materials required for the study

- Facilities of Pharmacy for the preparation of *Yashtimadhu ghritha malahara* and *Karpooora ghritha malahara*
- Facilities of OPD, minor OT and other sources.

METHOD OF COLLECTION OF DATA

a) Sample Size: A minimum of 60 patients fulfilling the diagnostic and inclusion criteria of either sex will be selected for the clinical study. They will be randomly assigned into two groups A & B with 30 patients each.

Group A: Standard group

30 patients will be managed with *Yashtimadhu ghritha malahara*

Group B: Trial group

30 patients will be managed with *Karpooora ghritha malahara*.

b) Diagnostic Criteria

Diagnosis was made on the basis of *Lakshanas* of *parikartika* that are -

- *Vedana* (pain)
- *Daha* (Burning sensation)
- *Shonita Srava* (Bloody discharge)
- *Shopha* (Edema)
- *Kandu* (Itching)

c) Inclusion criteria

- Patients with clinical signs and symptoms of Parikartika as explained in *Ayurvedic Classics*.
- Patients of age group between 17-60 years.
- Selection of patients is done irrespective of sex and religion.
- Patients with acute fissure of less than 3 months of duration

d) Exclusion criteria

- Parikartika secondary to Ulcerative colitis, tuberculosis, syphilis, CA rectum, Crohn's disease
- Inflammatory bowel diseases and other systemic disease pertaining to colorectum
- Patients with fistula in ano and haemorrhoids
- Patients with acute fissure of more than 3 months of duration
- Pregnant woman and immune suppressed patients

MATERIALS AND METHODS

Yashtimadhu ghritha malahara, *karpooora ghritha malahara*, cotton, lignocaine gel.

b) Design of the study

60 patients of Parikartika will be selected, distributed randomly in 2 groups. One group is the trial group which is managed by *Karpooora ghritha malahara* and the second group is the standard group managed with *Yashtimadhu ghritha malahara*.

c) Treatment design

- 1) Trial group

POORVAKARMA

- *Haritaki choorna* according to the *Koshta* given at bedtime with Luke warm water.
- Required materials kept ready.
- Procedure is explained to patient and consent is taken.

PRADHANA KARMA

- Patient is asked to lie down in lithotomy position
- Anal region is anaesthetized by placing 2% lignocaine gel for 5 mins (only on first day).
- Then *karpooora ghritha malahara* is applied.

PASCHAT KARMA

- Sitz bath with *panchavalkala kwatha* - twice daily
- *Hareetaki churna* 10gm at bedtime

DIET

- Much of fiber content diet

- Plenty of water intake
- Avoid spicy, oily, junk foods.
- Treatment done for 7 days
- follow-up on 14th, 21st and 42nd day.
- Parameters are noted on 7th, 14th, 21st and 42nd day.
- Complete assessment after 42 days
- Study duration – 42 days

2) Standard group - Same procedure as that of trial group is followed.

Assessment criteria

Assessment will be made on basis of subjective and clinical objective parameters both before and after the treatment as per clinical per a clinical Performa.

Pain: assessed by MRC (Medical Research Scale) Scale

Grade 0	Absence	No pain
Grade 1	Mild	Pain that can easily be ignored
Grade 2	Moderate	Pain that can be ignored, interferes with function and needs treatment from time to time
Grade 3	Severe	Pain is present most of time demanding constant attention

Constipation

Grade 0	Stool passed everyday
Grade 1	Stool passed once in 2 days
Grade 2	Stool passed once in 3 or more day

Burning sensation

G0	Nil	No burning sensation
G1	Mild	Occasional localised burning sensation
G2	Moderate	Intermittent localised burning sensation
G3	Severe	Continuous burning sensation which disturbs sleep

Bleeding

G0	No bleeding
G1	Mild bleeding – In streaks
G2	Moderate bleeding – in drops
G3	Severe – profuse bleeding

Pruritis ani

G0	No itching
G1	Patients complain of itching only when asked
G2	Once or twice in a day and relieved without any medications
G3	Patients complains of itching sensation many often in a day and discomfort
G4	Severe and constant itching sensation all the day long

Sphincter spasm

G0	No spasm
G1	Spasm present

Tenderness

G0	No tenderness
G1	Pain on deep palpation
G2	Pain on light pressure
G3	Pain on touch
G4	Patients does not allow to palpate due to pain

Discharge

G0	No discharge
G1	Discharge seen over the wound bed while examination irrespective of type of discharge (blood, pus, serous, mixed)

Length of ulcer – Assessed using healing index.
Healing index – initial length of ulcer / Healing time.

RESULTS

This study evaluated the effects of two Ayurvedic topical formulations in 60 patients with Parikartika (fissure-in-ano). All enrolled participants completed treatment: 30 were assigned to Group A (control), treated with Yastimadhu Ghrita Malahara, and 30 to Group B (trial), treated with Karpooora Ghrita Malahara. Patients were assessed repeatedly on Days 1, 3, 5, 7, 14, 21, and 42 for pain, constipation, burning sensation, bleeding, pruritus ani, sphincter spasm, tenderness, and ulcer length. ♦

The sample consisted mainly of adults aged 31–50 years, with the largest group aged 41–50 years (30%). Females constituted 55% and males 45%. Most participants were Hindu (85%), married (about 87%), and consumed a mixed vegetarian/non-vegetarian diet (48.33%). Posterior fissures were the most common presentation (78.33%). Housewives formed the largest occupational group (43.33%). Most participants reported sound sleep (78.33%), no smoking or tea habits (75%), medium exercise capacity (83.33%), Madhyama Koshta (66.66%), and Vata-Kapha Prakriti (67%). ♦

Both treatments produced marked improvement in pain. In Group B, mean pain scores declined from 2.93 on Day 1 to 0.03 by Day 42, a 99% reduction. In Group A, pain decreased from 2.93 to zero by Day 21 and remained absent on Day 42, representing a 100% reduction. Improvement became statistically significant by Day 5 and highly significant thereafter in both groups. Direct comparison showed Group A had significantly lower pain scores on Days 5 and 7, but the difference disappeared after Day 14 because both groups had minimal or no pain. ♦

Constipation resolved completely in both groups. Group B's mean score fell from 1.17 to zero by Day 14, while Group A's score declined from 1.23 to zero by Day 7. Both groups demonstrated highly significant improvement from baseline, but between-group comparisons found no statistically significant differences at any follow-up point. ♦

Burning sensation, bleeding, and pruritus ani also improved substantially. Burning sensation reached zero by Day 21 in Group B and by Day 7 in Group A. Bleeding resolved by Day 14 in Group B and by Day 7 in Group A. Pruritus ani disappeared by Day 7 in Group B and by Day 5 in Group A. Within-group changes were highly significant, showing that both formulations were associated with rapid symptomatic relief. ♦

Sphincter spasm improved more slowly, particularly in the Karpooora Ghrita group. Group B showed a 97% reduction by Day 42, whereas Group A achieved complete resolution by Day 14. Tenderness decreased by 99.2% in Group B and 100% in Group A. Ulcer length reduced from approximately 6 units at baseline to 0.03 in Group B by Day 42 and to zero in Group A by Day 14. These reductions were highly significant in repeated-measures analyses. ♦

Overall, both formulations were effective and produced sustained improvement through Day 42. Yastimadhu Ghrita Malahara generally showed faster early relief—especially for pain, burning, bleeding, pruritus, sphincter spasm, tenderness, and ulcer healing—while Karpooora Ghrita Malahara also achieved near-complete resolution of most outcomes by the end of follow-up. The findings are based on a relatively small study of 60 patients, so larger controlled studies would be needed to confirm comparative effectiveness.

Overall Response at Phases :			DAY7		DAY14		Mann-Whitney U Test
Response Ratings		Response	GROUP B (Trial) Frrequency (%)	GROUP A (Control) Frrequency (%)	GROUP B (Trial) Frrequency (%)	GROUP A (Control) Frrequency (%)	Group Statistics at DAY14 phase
(0%-25%)	☐	Poor Response	0	0	0	0	U Value = 327.5
(25%-50%)	☐	Mild Response	0	0	0	0	Effect Size = 0.36
(50%-75%)	☐	Moderate Response	22 (73%)	6 (20%)	1 (3%)	0	Z = 2.792

(75%-99%)	☐	Marked Response	7 (23%)	9 (30%)	8 (27%)	1 (3%)	p < 0.01
(99%-100%)	☉☐	Complete Response	1 (3%)	15 (50%)	21 (70%)	29 (97%)	Remarks : S
Group Total			30 (100%)	30 (100%)	30 (100%)	30 (100%)	S - Significant

DISCUSSION

Classical Ayurvedic texts describe the Guda as a highly vascular, clinically important region supplied by dhamani and sira. Sushruta considers it the terminal part of the sthulantra and describes it as approximately 4½ angula in length. This corresponds broadly with modern anorectal anatomy, where the anal canal is about 3–4 cm long and is richly supplied with blood vessels and nerves; this explains the severe pain and bleeding associated with fissure-in-ano.

Parikartika is described in Ayurveda as a painful ulcerative condition of the guda pradesha, occurring in contexts such as virechana vyapad, basti vyapad, and garbhini vyapad. Its characteristic chinateeava vedana, guda daha, bleeding, and linear anal ulcer closely correlate with fissure-in-ano. The association with hard stool, constipation, trauma to anal mucosa, and childbirth further supports this correlation. Previous clinical research has also evaluated Yashtimadhu Ghrita in acute fissure-in-ano/Parikartika and reported favourable healing and symptomatic improvement.◆

In the present randomized comparative clinical study, 60 clinically diagnosed patients of fissure-in-ano were equally divided into two groups. Group A received Yashtimadhu Ghrita Malahara and Group B received Karpooora Ghrita Malahara for seven days. Patients were assessed during treatment and followed up on the 14th, 21st, and 42nd days. Subjective parameters included pain, constipation, burning sensation, bleeding, and sphincter spasm, while tenderness and ulcer length were assessed objectively.

Among 60 patients, females constituted 55% and males 45%. The majority belonged to the age group of 41–50 years (33%), followed by 31–40 years (28%). Housewives constituted 43% and employees 33%,

suggesting that prolonged sitting, inadequate physical activity, irregular food habits, and constipation may be contributory factors. Mixed diet was reported by 48% of patients; low-fibre dietary habits may predispose to hard stool and anal trauma. Vata-Kapha prakriti was predominant (67%), while 78% of fissures were located posteriorly, which agrees with the common posterior midline location of anal fissures.

Both formulations produced improvement in clinical features. However, Group A showed significantly better reduction in pain, sphincter spasm, tenderness, and ulcer length, particularly on days 5, 7, and 14. Burning sensation improved earlier in Group B on day 3, whereas Group A showed superior improvement by days 5 and 7. Neither group produced statistically significant improvement in constipation, indicating the need for dietary fibre, adequate water intake, bowel regulation, and lifestyle measures alongside local treatment. Bleeding subsided completely by day 14 in both groups and remained absent up to day 42.

Yashtimadhu Ghrita Malahara may act through its madhura, sheeta, snigdha, pitta-shamaka, and vranaropana properties. Its unctuous base reduces friction during defecation, protects fissure margins, relieves Vata-induced pain and spasm, and promotes granulation and epithelialization. Yashtimadhu contains glycyrrhizin and related constituents with reported anti-inflammatory, antioxidant, and mucoprotective actions. Karpooora Ghrita Malahara acts through snigdha, vatahara, shothahara, vedanasthapana, and vranaropana effects; Karpooora may provide early relief in burning and pain, while Shatadhauta Ghrita supports hydration, lubrication, wound cleansing, and tissue repair. A published case report similarly noted symptomatic improvement with Karpooora Ghrita-based local therapy in Parikartika.◆

Before treatment



After Treatment



CONCLUSION

Parikartika, characterized by cutting pain around the anus, closely correlates with fissure-in-ano based on its pathology, location, and clinical features. Most participants were aged 20–50 years, with higher incidence among females and non-vegetarians, possibly due to low soluble-fibre intake and constipation. Both Yashtimadhu Ghrita Malahara and Karpooora Ghrita Malahara produced significant improvement, though Yashtimadhu Ghrita Malahara was more effective. The findings suggest that fissure-in-ano can be managed conservatively with Ayurvedic medications. Limitations included small sample size, short study duration, and random patient selection. Future studies should involve larger samples, longer follow-up, varied fissure severity, specific patient subgroups, and further evaluation of Karpooora Ghrita Malahara's mechanism.

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