



A CASE STUDY TO EVALUATE THE ROLE OF PANCHAVALKAL OINTMENT IN FISSURECTOMY WOUND

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Abstract: Anal fissure is a common anorectal disorder characterized by severe pain, burning sensation, and bleeding during defecation. In Ayurveda, the condition can be correlated with Parikartika, which is described under disorders caused by aggravated Vata and Pitta Dosha. Surgical management such as fissurectomy is often indicated in chronic cases, where proper post-operative wound care is essential for rapid healing and prevention of complications. Panchavalkal, a classical Ayurvedic formulation comprising the bark of five medicinal plants, possesses Vrana Shodhana (wound cleansing), Vrana Ropana (wound healing), anti-inflammatory, antimicrobial, and analgesic properties. This case study was conducted to evaluate the role of Panchavalkal ointment in the management of fissurectomy wounds. The ointment was applied locally in the post-operative period, and the patient was assessed for pain, tenderness, discharge, swelling, and wound healing during follow-up visits. Significant improvement was observed in wound healing, reduction in pain and inflammation, and formation of healthy granulation tissue without adverse reactions. The Ayurvedic properties of Panchavalkal helped in maintaining wound hygiene and promoting faster tissue repair.

The findings suggest that Panchavalkal ointment is a safe and effective topical formulation for post-fissurectomy wound management. Incorporation of Ayurvedic principles in post-operative care may enhance healing and improve patient comfort. However, further clinical studies with larger sample sizes are required to establish its efficacy scientifically.

Key Words – Parikartika, Fissure, Fissurectomy, Panchavalkala, Anorectal, Vranaropana

I. INTRODUCTION

Anal fissure is one of the most common anorectal disorders encountered in clinical practice. It is characterized by a longitudinal tear in the anoderm, usually causing severe pain during defecation, bleeding per rectum, burning sensation, and discomfort. Chronic fissures often require surgical intervention such as fissurectomy when conservative management fails. Although fissurectomy provides symptomatic relief, post-operative wound management remains an important aspect for achieving faster healing, reducing pain, preventing infection, and improving patient comfort.

In Ayurveda, anal fissure can be correlated with Parikartika, a condition described in classical texts characterized by cutting and burning pain in the anal region due to vitiation of Vata and Pitta Dosha. Ayurvedic management emphasizes Vrana Shodhana (wound cleansing) and Vrana Ropana (wound healing) using herbal formulations with antimicrobial, anti-inflammatory, and healing properties.

Panchavalkal is a well-known Ayurvedic formulation consisting of the bark of five medicinal plants namely Vata (*Ficus benghalensis*), Udumbara (*Ficus racemosa*), Ashwattha (*Ficus religiosa*), Parisha (*Thespesia populnea*), and Plaksha (*Ficus lacor*). These drugs possess Kashaya Rasa (astringent property), which helps in wound contraction, reduction of discharge, inflammation control, and promotion of healthy granulation tissue formation. Panchavalkal preparations are traditionally indicated in the management of wounds, ulcers, and inflammatory conditions due to their proven Vrana Shodhana and Vrana Ropana actions.

Considering these therapeutic properties, Panchavalkal ointment may play a beneficial role in post-fissurectomy wound care. The present case study was undertaken to evaluate the effectiveness of Panchavalkal ointment in promoting wound healing and reducing post-operative complications following fissurectomy.

II.CASE REPORT

A 30-year-old male patient had complaints of constipation associated with pain and burning sensation in the perianal region during and after defecation for 7 days. Pain was mild to moderate before 3 days and subsided after 15 minutes of defecation. But after 3 days, pain became aggravated daily, and symptoms like pain and burning sensation persisted up to half an hour after defecation. The patient also had associated complaints of constipation and the presence of blood streaks while passing stool. The patient was using analgesics, which provided short-term relief, but the symptoms aggravated again after the drug action period ended.

Per rectal examination was done to analyze the proper diagnosis. On inspection, an acute longitudinal ulcer with indurated margins was identified at the 6 o'clock position in the lower part of the anal canal. Hypertonicity of the anal sphincter was analyzed with digital rectal examination using the little finger. Fissurectomy was performed at our hospital.

III.MATERIALS AND METHODS

Study Design

The present study was designed as a single case study to evaluate the efficacy of Panchavalkal ointment in the management of post-operative fissurectomy wound healing.

Case Selection

A patient diagnosed with chronic anal fissure and advised for fissurectomy was selected from the inpatient department of Shalya Tantra. Written informed consent was obtained from the patient prior to the study.

Materials Used

Panchavalkal ointment

Sterile gauze and dressing materials

Normal saline for wound cleaning

Standard surgical instruments for fissurectomy procedure

Composition of Panchavalkal

Panchavalkal consists of the bark of five medicinal plants:

1. Vata – *Ficus benghalensis*
2. Udumbara – *Ficus racemosa*
3. Ashwattha – *Ficus religiosa*
4. Parisha – *Thespesia populnea*

5. Plaksha – Ficus lacor

These drugs are predominantly Kashaya Rasa dominant and possess Vrana Shodhana and Vrana Ropana properties..

1. Inclusion criteria

- Between the age group 18 -65.
- Patients of post operative fissurectomy..
- Patient giving consent were included.

2. Exclusion criteria

- Patient with any major co-morbid such as Uncontrolled DM, Hypertension, etc.
- Patient with immunocompromised disease.
- Patients with acute fissure in ano.
- Patient having bleeding disorder

3. Withdrawal criteria

- Sudden increase in signs and symptoms.
- Those patients refusing treatment in spite of the consent given before.
- If Patient develop any adverse effect.

IV.MATERIALS

Panchavalkala ointment was prepared from GMP certified pharmacy

V.METHODS

Treatment protocol

Patients were administered with oral administration of softovac powder 1tsp HS and sitz bath with warm water after passing stools .and panchavalkala ointment was applied locally.The assessments were done on every 1st, 5th, 10th, 15th day.

Assessment

Assessments were done on every 1st, 5th, 10th, 15th day.using following subjective and Objective criteria.

a. Subjective criteria

1. Pain : Nil / Mild /Moderate / Severe According to Vas Scale
2. Granulation : Present / absent or Healed
3. Discharge : Nil / Serous discharge / Seropurulent
4. Tone of sphincter : Normal / Mild (Minimal Discomfort But Can Pass An Index Finger) Moderate (Efforts needed to pass index finger) / Severe (Mildly Contracted Cannot do digital examination)
5. Bleeding : Nil / Mild (Streak of blood on stool) / Moderate Blood along with Stool 1-2 Drops / Severe (Spurt of blood)

b. Objective criteria

1. Size of wound : Wound surface area will be measured in mm² at each assessment day

VI.OBSERVATIONS AND RESULT

The present case study showed encouraging results in the management of post-fissurectomy wound using Panchavalkal ointment. Progressive improvement was observed in both subjective and objective parameters during the follow-up period conducted on the 1st, 5th, 10th, and 15th post-operative days.

VII.DISCUSSION

Fissurectomy is a commonly performed surgical procedure for chronic fissure-in-ano; however, post-operative wound management plays a vital role in reducing pain, preventing infection, and promoting early wound healing. In the present case study, Panchavalkal ointment was used as a local application after fissurectomy, and its effect on wound healing was assessed on the 1st, 5th, 10th, and 15th post-operative days.

Observations	1 st day	5 th day	10 th day	15 st day
Size of Wound	18 mm ²	12 mm ²	6mm ²	0
Granulation	Absent	Present	Present	Healed
Discharge	Serous	serous	Nil	Nil
Tone of sphincter	Severe	Moderate	Mild	Normal
Pain	Severe	Mild	Mild	Nil
Bleeding	Mild	Mild	Nil	Nil

The observations of the study demonstrated progressive improvement in all clinical parameters. The wound size reduced gradually from 18 mm² on the 1st day to complete healing by the 15th day. Healthy granulation tissue formation was observed from the 5th day onwards, indicating effective tissue regeneration and wound healing. Serous discharge present initially subsided completely by the 10th day, suggesting proper wound cleansing and reduction of local inflammation. Pain and sphincter spasm also reduced significantly during follow-up, resulting in improved patient comfort and ease during defecation. Mild bleeding observed in the initial phase was absent by the 10th day.

The beneficial effects of Panchavalkal ointment can be attributed to the pharmacological and Ayurvedic properties of its ingredients. Panchavalkal contains the bark of Vata, Udumbara, Ashwattha, Parisha, and Plaksha, which are predominantly Kashaya Rasa dominant and possess Vrana Shodhana and Vrana Ropana properties. Kashaya Rasa helps in wound contraction, reduction of discharge, and improvement of local tissue integrity. The anti-inflammatory and antimicrobial actions of the formulation may have contributed to prevention of secondary infection and reduction of edema and tenderness.

From an Ayurvedic perspective, fissure-in-ano can be correlated with Parikartika, where vitiated Vata and Pitta Dosha lead to severe cutting pain and burning sensation. Panchavalkal, due to its Sheeta, Kashaya, and healing properties, helps in pacifying aggravated Pitta and promotes wound healing by supporting healthy granulation tissue formation. Regular sitz bath and maintenance of bowel habits with softovac powder further aided the healing process by preventing constipation and minimizing trauma to the wound during defecation

VIII.CONCLUSION

The present case study demonstrates that Panchavalkal ointment is a safe and effective topical formulation for the management of post-fissurectomy wounds. Regular local application of Panchavalkal ointment showed significant improvement in wound healing, reduction in pain, discharge, bleeding, and sphincter spasm, along with early formation of healthy granulation tissue. The Ayurvedic properties of Panchavalkal such as Vrana Shodhana and Vrana Ropana contributed to faster recovery and improved patient comfort without any adverse effects. Therefore, Panchavalkal ointment can be considered a beneficial adjunct in

post-operative care of fissurectomy wounds. Further large-scale clinical studies are recommended to establish its efficacy and therapeutic role scientifically.

IX. REFERENCES

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