



CASE REPORT

AYURVEDIC MANAGEMENT OF ACUTE FISSURE-IN-ANO- A CASE SERIES

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Abstract

In this case series, 18 to 20 years old 4 acute fissure-in-ano patients with severe pain, constipation, bleeding per rectum were selected. They were with common *nidanas* like intake of hot and spicy food items. On examination, a linear ulcer on anal verge associated with slight bleeding, tenderness and sphincter spasm and was diagnosed as acute fissure-in-ano. The selected patients were managed with *nidana parivarjana*, internal administration of *gandharvahasthadi kashayam*, *triphala choornam* as laxative, *triphala kashayam* for sitz bath, anal dilatation and 10 ml instillation of *haridradi ghritha*. These patients attained complete wound healing and relief from associated symptoms such as tenderness, pain, bleeding from fissure, sphincter spasm within a period 10 days. In conclusion, Ayurvedic management in acute fissure-in-ano is an effective and safe alternative method.

Introduction

Fissure-in-ano is a tear in the longitudinal axis of the lower anal canal. ¹It is a distressing ano-rectal disorder with prevalence of 18%, which mostly occurs in the age group of 18 to 40. ² There are two types of fissure-in-ano; acute and chronic. Acute fissure is a deep tear in the anal canal with severe sphincter spasm with surrounding oedema. Bright streak of blood with the passage of stool and pain after defecation are the characteristic features. ³ When acute fissure-in-ano fails to heal even after six weeks, it will develop into chronic type. ⁴ Chronic anal fissure has inflamed, indurated margin with scar tissue. Its upper end with hypertrophied anal papilla and lower end with sentinel pile. Chronic fissure is less painful than acute one. Anal fissure often leads to reduced quality of life and loss of working hours. ⁵

Intake of hot and spicy food items, junk food, daily intake of non-vegetarian food in increased quantity, skipping of food, irregular bowel habits, less intake of water, constipation, sleep deprivation, mental stress, continuous use of psychosomatic drugs, ⁶ changes in hormone levels, particularly estrogen and progesterone, during menstruation, pregnancy⁷ etc. are the etiological factors of this disease. In current medical approaches, conservative treatments

like analgesics, stool softeners, muscle relaxants, and dietary modifications provide only temporary relief. Lord's procedures of anal dilatation carry a risk of fecal incontinence.³ Surgical interventions like sphincterotomy and fissurectomy may result in complications like persistent mucous discharge, abscess formation, and post-operative anal stenosis.¹ Therefore, it was essential to explore alternative and improved treatment strategies for fissure-in-ano.

According to in Ayurveda, fissure-in-ano resembles *parikartika*, which having *kartanavat shoola* (sharp shooting pain) around anus with symptoms like *daha* (burning sensation), *asra sraava* (bleeding) etc.⁸ In the word '*parikartika*', '*pari*' means '*sarvatho bhaavaha*' (around the anus) and '*kartika*' means sharp shooting pain.⁹ Although *Brihatrayi* are not explained it as an individual disease, rather explained it in different contexts. It has been mentioned as one of complication of *vamanavirechana vyapat*,¹⁰ *vasti vyapat*¹¹ and as *vataja atisaara lakshana*¹² in *Charaka Samhita*. According to acharya Susruta, it is mentioned in the context of *vamanavirechana vyapat*¹³ and in *Ashtanga Hridaya* it is one of the *arsho purvarupa*, and as a *pureeshavritavata lakshana*.¹⁴ In *Kashyapa Samhita* it is explained as *garbhini vyapat* and explained about types of *parikartika* (Three types- *Vatika*, *Paitika*, and *Kaphaja*). As *parikartika* is a *vata-pitta dushti vikara*¹³ (dosha predominance of this disease told by Acharya Susruta) this disease occurs more in individuals with *vata-pitta prakriti*. Its treatment principle is *vatanulomana*, *agnivardhana*, *vata-pitta samana anna-pana-kriyas*, *vrana ropana*.

Contemporary medicine has its own limitations to treat this disease. Therefore, it is need to find an alternative and effective treatment measure. In this case series, the selected patients were managed with *nidana parivarjana*, internal administration of *gandharvahasthadi kashaya*, *triphala choorna* as laxative, *triphala Kashaya* for sitz bath, anal dilatation and 10 ml instillation of *haridradi ghritha*. Patients experienced complete wound healing and achieved relief from tenderness, pain, bleeding, and sphincter spasms within a span of 10 days.

METHODOLOGY

SELECTION CRITERIA

a) Subject inclusion criteria

1. Anal fissure with longitudinal ulcer in anterior midline/posterior midline or both with excruciating pain, spasm of anal sphincter diagnosed by clinical examination.
2. Participants within the age group of 18-20 years.
3. Participants with written informed consent.

b) Subject exclusion criteria

1. Fissure-in-ano with cases of colorectal carcinoma, Crohn's disease, ulcerative colitis, tuberculosis, and fistula-in-ano.
2. Pregnant women.
3. Case of diabetes mellitus, anemia (Hb < 9gm / dL).
4. Cases of HIV / Hepatitis B infection and any other venereal diseases.

CASE SERIES In this case series, 18 to 20 years old 4 acute fissure-in-ano patients were selected on the basis of clinical examination.

CASE 1

A 20-year-old male patient presented with complaints of severe pain during defecation, bleeding per rectum, constipation for 03 days. The patient had habits of regular intake of hot and spicy food, junk food and less intake of water (less than 2 L/day). There was no relevant family history and history of previous illness.

On examination (15/5/2023), there was a linear ulcer on the anal verge with slight bleeding in the posterior midline (Acute fissure-in-ano), grade-3 tenderness, grade-2 sphincter spasm.

CASE 2

An 18-year-old female patient presented with complaints of pain during defecation for three days. The patient had habits of skipping food, consuming non-vegetarian food in increased quantity and consuming hot and spicy food. There was no family history and history of past illness.

On examination (17/7/2023), there was an acute fissure -in-ano in the anterior midline, grade-3 tenderness, and grade-2 sphincter spasm.

CASE 3

A 19-year-old male patient with severe pain during defecation with slight bleeding, constipation for 04 days. He had habits of skipping of food, reduced sleep (less than 3 hours/day), Intake of fast food and junk food, anxiety. There was no relevant family history and history of previous illness.

On examination (21/8/2023), there was an acute fissure -in-ano with slight bleeding in posterior midline, grade-2 tenderness, grade-1 sphincter spasm.

CASE 4

A 20-year-old female patient presented with complaints of constipation, pain and burning sensation during defecation for 04 days. He had habits of Intake of hot and spicy food, non-vegetarian food in increased quantity, less intake of water (less than 2L/day). There was no family history and history of past illness.

On examination (25/9/2023), there was an acute fissure-in-ano in the posterior midline, grade-3 tenderness and grade-1 sphincter spasm.



Figure 1. Acute fissure-in-ano at posterior midline before treatment

• THERAPEUTIC INTERVENTION

Management

A.Nidana parivarjana

B.Medications

A. Nidana parivarjana

Avoidance of causative factors of the fissure-in-ano such as intake of hot and spicy food items, junk food, daily intake of non-vegetarian food in increased quantity, skipping of food, irregular bowel habits, less intake of water, constipation, sleep deprivation, mental stress etc.

B. Medications

| Sl no. | Medicine | Dose | Time | Mode of use |
|--------|--------------------------|---------------------|---------------|--------------------------------------|
| 1 | Gandharvahastadi Kashaya | 90 ml BD | 6AM and 6PM | 1 hour before food |
| 2 | Triphala churna | 10 gm OD | 9 PM | With hot water |
| 3 | Triphala kashaya | Sufficient quantity | 8 AM and 5 PM | For sitz bath |
| 4 | Haridradi ghritha | 10 ml | 10 AM | For anal dilatation and instillation |

Patients in cases 1, 2, 3, and 4 achieved complete resolution of acute fissure-in-ano on the 9th, 8th, 6th and 7th days, respectively.



Figure 2. Anal dilatation with metallic anal dilator using Haridradi ghritha



Figure 3. Instillation with 10 ml Haridradi ghritha

OBSERVATIONS AND RESULTS

As parikartika is a vata-pitta dushti vikara, this disease occurs more in individuals with vata-pitta prakriti. Internal administration of gandharvahastadi kashayam etc medication caused the complete cure of acute fissure-in-ano. Nidana parivarjana like avoidance of intake of hot and spicy food items, junk food, fast food etc caused acceleration of healing process and thereby got relief from the associated symptoms within 10 days.



Figure 4. Healed scar of acute fissure-in-ano at posterior midline

DISCUSSION

The etiological factors (nidana) causing acute fissure-in-ano are:

- **Nidana**
- **Ahara**
 - Intake of hot and spicy food items - *Katu, amla, theekshna, ushna ahara*.
 - Intake of junk food and fast food- *Ruksha, katu, amla, lavana, vidahi anna*.
 - Daily intake of non-vegetarian food in increased quantity- *Ruksha, katu, ushna gurubhojana*.
 - Skipping of food- *Pramita bhojana*.
 - Intake of water- Causing *sareera rukshata*.
- **Vihara**
 - Irregular bowel habits- *Dharana and uddheerana of vegas*.
 - Constipation- Due to *sareera rukshata*.
 - Sleep deprivation- *Nisa jaagarana*.
- **Manasika nidana**
 - Mental stress- *Bhaya, shoka, chinta, krodha*.

Nidana parivarjana along with other internal medication can cause the acceleration of healing process of fissure-in-ano. And also, *nidana parivarjana* can prevent the recurrence of the disease.

- **Samprapti**
- Pathogenesis (*Samprapti*) of acute fissure-in-ano-

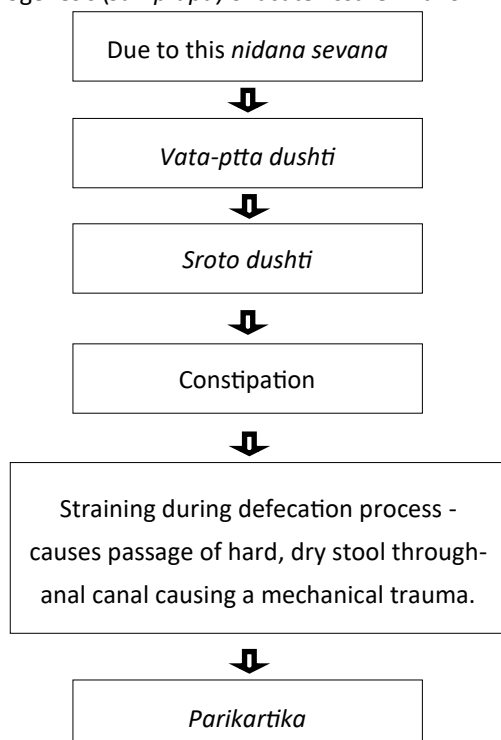


Figure 5. *Samprapti* of *parikartika*

Anal dilatation helps in the healing of the fissure by reducing sphincter spasm. When spasm of sphincter relieved, blood flow will increase, which may promote healing.¹⁴ Along with this, the anal instillation of a *vranahara* drug accelerates the healing process.

Haridradi ghritha, mentioned in *dwivraneeya chikitsa* of *kashyapa samhita*, was selected here for the management of fissure-in-ano in the form of anal dilator lubricant and anal instillation, having *vranahara* and *vata-pittahara* properties that are beneficial to treat symptoms of *parikarthika*.

Haridra, daruharidra, tila, saindhava, madhukam, trivrit, and *nimbapatra* are the ingredients of *haridradi ghritha*. All these drugs have *vranahara* properties. *Haridra* has *vata-pitta naasana* properties. Curcumin, a phytoconstituent found in *haridra*, has significant wound-healing properties.¹⁴ *Daru haridra* has *pittasaamaka, vedanaasthapana* and *rakta sthambhaka* properties. *Tila* is *anilaapaha, sookshma*, and *yogavahi*. *Madhuka* is *shonithastapana* and *pittaasra nasana*. Liquorice (*madhuka*) root has analgesic effects.¹⁵ *Trivrit* has properties like *kapha-pitta prasamana*, and *shodhahara*. *Operculina turpethum* (*trivrit*) has analgesic and antiulcer activity.¹⁶ *Nimba patra* is *visheshena vranaghna, vatahara*, and *kapha-pittahara*. *Azadirachta indica* (*nimba*) leaves have wound-healing action.¹⁷ *Ghritha*, which is *uttama* among *snehas*, also provides *vranahara* *shodhana-ropana karma, pittanilahara, nirvapana, mridukara, madhura*, and *seetha*. *Haridradi ghritha*, in the form of anal dilator lubricant and anal instillation, cures fissure-in-ano.

Gandharvahasthadi kashayam has the properties of *vatanulomana, malashodhana* and improves *agni bala*. It may also help to cure *apana vata dushti roga* like *parikartika*.¹⁸

Sitz bath is effective in alleviating pain, swelling, and sphincter spasm. It also reduces infection and improves circulation, which in turn helps in the healing of fissure-in-ano.

¹⁹ *Avagaha sweda* is *vata-kapha hara*.²⁰

Triphala churna helps in *vranahara* (wound healing effect), *asrajit* (reduces bleeding).²¹ It used as laxative in constipation. *Terminalia chebula* has antibacterial activity, astringent property and improve wound healing. *Embilica officinalis* exhibits antimicrobial action. *Terminalia bellerica* possess anti-inflammatory, analgesic, anti-bacterial properties. And also has astringent and styptic property which helps in hemostasis. The cumulative effect of sitz bath with *triphalachurna* accelerates the healing process.²²

Conclusion

Acute fissure-in-ano is a painful ulceration of anal canal, which is one of the most distressing proctological disease that affects the vast majority of people regardless of age and gender. The condition has a great impact on daily routine due to its terrible discomfort. Intake of hot and spicy food items, junk food, irregular bowel habits, constipation etc acts as *nidana* of this disease. Thus, *nidana parivarjana* along with Ayurvedic medications helps to cure anal fissures.

STRENGTH OF THE STUDY

This study highlighted the significance of *nidanaparivarjana* in the management of acute fissure-in-ano. And also included *haridradi ghritha* as a novel drug in the treatment.

LIMITATION OF THE STUDY

This study did not include follow-up period. So, the recurrence of the disease was not assessed.

ETHICAL CONSIDERATIONS

- Informed written consent was taken from the patient before publication.
- Data leading to personal identification including name, address, photographs without masking faces were not included in the entire case report.
- Ethical clearance obtained from Institutional Ethics Committee dated 24/05/2024 with reference number 10 /SL-AR/IEC/2024.

CONFLICT OF INTEREST

Nil

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