



EFFECT OF *PAPAYA KSHEERA* BASED *NIMBA KSHARASUTRA* IN THE MANAGEMENT OF *CHARMAKEELA W.S.R SENTINEL PILE*: A CASE REPORT

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ABSTRACT:

Sentinel pile (*Charmakeela*) is a skin tag in the lower margin of the anal fissure which is oedematous and commonly associated with chronic fissure. It causes itching, discomfort, perianal hematoma, low grade infection and abscess formation. Constipation, diarrhoea, trauma, sexually transmitted diseases are the common etiological factors. History and physical examination without further investigations will allow the diagnosis of an anal fissure in most of the patients. *Kshara Sutra* Therapy is a simple and safe parasurgical procedure, cost-effective and ambulatory, minimal recurrence rate, no surgical complications like incontinence, stenosis and stricture. This case report of 21 years old female, working as a IT professional; complaints of mass per rectum, anal discomfort, swelling, mild pain and itching in the anal region which has been treated with application of *Papaya Ksheera* based *Nimba Ksharasutra* without any surgical intervention has been discussed here.

Key words: *Sentinel pile*, *Fissure-in-ano*, *Charmakeela*, *Ksharasutra*, *Papaya*, *Nimba*

INTRODUCTION

Fissure-in-ano is of two types namely acute fissure and chronic fissure. Fissure-in-ano (*Parikartika*) is an ulcer in the longitudinal axis of the lower anal canal, which commonly occurs in the midline posteriorly but can also occur in the midline anteriorly. Anterior anal fissure is common in middle aged females due to lack of support to pelvic floor. Ulcer is superficial and small but the lesion is distressing.^[1] Sentinel pile (*Charmakeela*) is a skin tag in the lower margin of the anal fissure which is oedematous and commonly associated with chronic fissure. It causes itching, discomfort, perianal hematoma, low grade infection and abscess formation. Constipation, diarrhoea, trauma, sexually transmitted diseases are the common etiological factors.

History and physical examination without further investigations will allow the diagnosis of an anal fissure in most of the patients. A chronic anal fissure has raised edges exposing the internal anal sphincter muscle fibres underneath, while an acute anal fissure appears as a fresh laceration. Chronic anal fissures are also often accompanied by an external skin tag (sentinel pile) at the distal end of the fissure and a hypertrophied anal papilla at the proximal end. Chronic fissure-in-ano is having the prevalence rate approximately 30–40% of total ano-rectal sufferings whereas the incidence is supposed to be very common in constipated people particularly one who pass hard and dry stool.^[2] The modern surgical treatments such as fissurectomy, sphincterotomy and Lord's anal

dilatation have their own limitations like recurrence, incontinence, etc.

In classics, *Parikartika* resembles with fissure-in-ano having burning and cutting pain at *Guda. Basti* and *Virechana Vyapada* (complication of the *Basti* and *Virechana* procedures) are the factors responsible for *Parikartika*^[3]

Kshara Sutra Therapy is a simple and safe parasurgical procedure, cost-effective and ambulatory, minimal recurrence rate, no surgical complications like incontinence, stenosis and stricture. It is a known fact that satisfactory and curable result is being achieved in ano-rectal disorders like piles, fistula, fissure, sentinel tag etc., by the application of *Ksharasutra* and other products of *Kshara* due to its *Ksharana* and *Kshanana* property^[4]

Snuhi Ksheera based *Apamarga Ksharasutra* is proved effective treatment in the management of Sentinel pile^[5]. But, burning sensation, local irritation during the course of therapy and difficulty of manufacturing process has limited its use. Thus considering the entire factor this case study was done to evaluate the efficacy of *Papaya Ksheera* based *Nimba Kshara Sutra* in the management of *Charmakeela*. Basic principles of management adopted were *Ksharana*, *Kshanana*, *vraha sodhana*, *Soolahar*, *Sothahara* and *Krimighna*.

CASE REPORT:

Objective of case study: To evaluate clinical efficacy of *Papaya Ksheera* based *Nimba Ksharasutra* in the patient with Sentinel pile mass.

Type of study: Interventional single case design without control group

Study center: SDM College of ayurveda and hospital, Hassan, Karnataka

Name of the patient- Not mentioned

Registration no: OP-063119, Date of first OPD visit – 08/08/23, Age- 21 yrs, Gender- Female, Religion- Hindu, Occupation- IT professional

History of Present Illness

Patient was apparently healthy 3 months back. Then, she had developed with an acute onset of pricking pain and bleeding per rectum during defecation as streaks associated with hard stools. The pain was present after defecation and lasted for few minutes to hours. Gradually she felt some discomfort over anal region which was associated with swelling over the anal verge. After 2 months, she had severe itching and discomfort with mass like feeling over the anal verge. So, she consulted to the *Shalya Tantra* ARC OPD of SDM College of Ayurveda & Hospital, Hassan for Ayurvedic management. Based on the symptoms and per rectal examination, she was diagnosed with *Charmakeela* (sentinel pile) as a result of chronic fissure in ano.

History of Past Illness

Patient was not a known case of any type of allergy, diabetes mellitus, hypertension, tuberculosis or any other major systemic disorder.

History of Past Illness

There were no past histories of any type of allergy, diabetes mellitus, hypertension, tuberculosis or any other major systemic disorder.

Treatment History: NIL

Personal History

Diet: Non-vegetarian, Appetite: Good, Bowel: Hard stool, irregular, once in 2days, Micturition : Regular, Sleep : Sound

Menstrual History

Age of Menarche - 13 years, Cycle length & Frequency - 4/28 Interval - Regular

General Examination

General Condition: Fair, Nutritional status: Well nourished, Pallor: Absent, Icterus: Absent, Cyanosis: Absent, Clubbing: Absent, Lymphadenopathy: Absent, Oedema: Absent

Vitals

BP: 110/70 mm of Hg, Temperature: 98.4°F, Pulse: 76bpm, Regular, Respiratory rate: 18/min

Systemic Examination

Cardiovascular System: S₁ S₂ M₀

Central Nervous System: Intact, Conscious, well oriented to time, place and person.

Respiratory System: Equal air entry to B/L lung fields, NBVS +

Per Abdomen: Soft, no organomegaly, non tender

Per Rectal Examination:

Inspection: Healed fissure with Sentinel tag at 12 o'clock position

Digital Rectal Examination: Normal tonicity, tenderness felt at 12 o'clock position

Proctoscopy: Anal mucosal congestion

Investigations

All the vital parameters were within normal limits. Hb – 12.3 gm/dl; Wbc – 5,500 /cu mm of blood; RBS – 101 mg/dl; ESR – 11 mm /hour, HIV-negative, HbsAg- negative

Diagnosis

Parikartika/Chronic fissure-in-ano with *Charmakeela*/Sentinel pile at 12 o'clock position.

MATERIALS AND METHODS

Papaya Ksheera based *Nimba Ksharasutra* ligation in management of sentinel pile mass.

Purva Karma

- Patient was laid down in lithotomy position.
- Painting with Betadine solution followed by draping was done.
- All the necessary instruments, *Ksharasutra*, etc. made ready.

Pradhana Karma

The base of the sentinel pile was help with the help of artery forceps. Then at the base *Papaya Ksheera* based *Nimba Ksharasutra* was ligated tightly.

Paschat Karma

Yashtimadhu Taila Pichu application was done.

Patient was instructed to do Sitz bath using *Triphala Kashaya* twice daily.



FIG 1: Diagnosed with chronic fissure with sentinel tag at 12 o'clock position



FIG 2: *Papaya Ksheera* based *Nimba Ksharasutra* ligated at the base of sentinel pile mass (08/08/23)

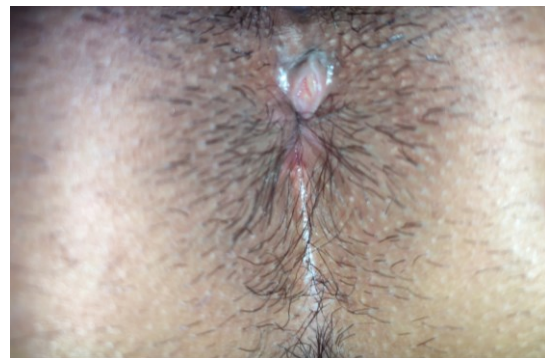


FIG 3: After cut through of sentinel pile mass (15/08/23)

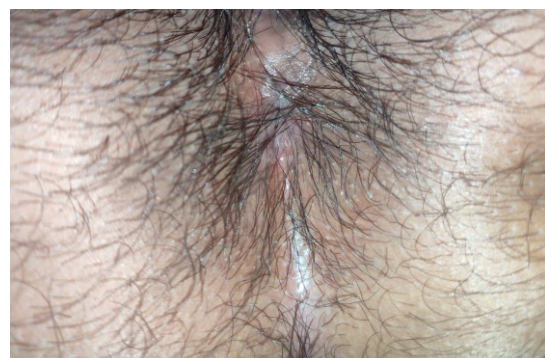


FIG 4: Complete healed wound (22/08/23)

Follow up

Patient came for follow up after *Ksharasutra* gets cut through.

Signs & symptoms and size of sentinel pile were assessed before and after *Ksharasutra* get cut through.

Oral medications

- *Triphala Guggulu* (2-0-2) A/F
- *Gandhaka Rasayana* (2-0-2) A/F
- Tab. *Haritaki* DS (2HS) B/F

The Sentinel pile mass got cut through on 7th day with negligible wound.

Patient was free from pain and itching.

Patient got completely symptomatic relief and improved quality of life.

RESULT

Table No 1: Parameters before and after treatment

Signs and symptoms	Before treatment	After treatment
Mass per rectum	Present	Absent
Pain in anal region	Present	Absent
Itching in anal region	Present	Absent
Anal discomfort	Present	Absent

Table No 2: Timeline of the case

05/05/23	Patient complaints with pricking type of pain in anal region and bleeding per rectum during defecation associated with hard stools.
21/05/23	Patient felt severe itching with swelling in anal verge associated with discomfort in anal region
08/08/23	Symptoms got aggravated and patient visited at ARC OPD, SDMCAH, Hassan Patient got diagnosed with chronic fissure-in-ano with sentinel tag at 12 o'clock position
08/08/23	<i>Papaya Ksheera</i> based <i>Nimba Ksharasutra</i> was ligated tightly at the base of sentinel pile mass at 12 o'clock position
14/08/23	Sentinel pile mass got cut through by <i>Ksharasutra</i>
15/08/23	Patient visited ARC OPD with healthy wound and no complaints of pain, itching, anal discomfort
22/08/23	Patient came for follow up with healed wound with complete symptomatic relief and improved quality of life

DISCUSSION:

In the present study, the efficacy of *Papaya Ksheera* based *Nimba Ksharasutra* in management of *Charmakeela* was assessed by pain in anal region, itching before and after treatment with days required for complete wound healing

Probable mode of action of *Papaya Ksheera* based

***Nimba Ksharasutra*:** This *Ksharasutra* is prepared using *Nimba Kshara* (*Achyranthus aspera* L.), *Papaya Ksheera* (latex of *Carica Papaya* linn.), and *Haridra Churna* (powder of *Curcuma longa* L.) Prepared with a standard method described in

Ayurvedic Pharmacopia of India.^[5] The properties of *Nimba Kshara* are *Krimighna* (Anti-microbial), *Kandughna* (Anti-pruritic), *Chedana* (excision), *Bhedana* (incision), *Ksharana* (debridation), *Stambhana* (haemostatic), *Shodhana* (purification) and *Ropana* (healing). *Chedana* and *Bhedana* properties of *Kshara* helped in the excision of the sentinel pile.^[6] *Papaya latex* contains alkaloid called *Papain*, which is an important proteolytic enzyme. *Nimba Kshara* contains *Nimbidin*, *Nimbin* which have antimicrobial properties, *Papaya Ksheera* stimulates the healthy granulation tissue for healing and *Nimba* having antimicrobial properties keeps the wound healthy.

CONCLUSION:

The choice of treatment in sentinel pile is surgical management but it has significant morbidity, expensive and needs long time for the recovery with post operative complications ^[7]. *Papaya Ksheera* based *Nimba Ksharasutra* application is a minimal invasive parasurgical procedure which is less time consuming and cost effective. *Papaya Ksheera* based *Nimba Ksharasutra* ligation of sentinel pile is a safe, ambulatory, OPD procedure that is a good alternative to surgical management. This *Ksharasutra* has better effect than Standard *Apamarga Ksharasutra* in terms of faster wound healing and reduction of itching in anal region referring to the previous studies ^[7]. Hence, applicability of *Papaya Ksheera* based *Nimba Ksharasutra* plays an important role in the management of *Charmakeela*.

Patient perspective: Patient was very much satisfied as she got entirely symptomatic relief

before treatment, the condition had affected her profession and life quality

Informed Consent: Patient provided informed consent for the publication of this case report.

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