



Integrative Management of *Shataponaka Bhagandar* (Complex Fistula)-A Single Case Study

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Abstract

Fistula in ano is one of the troublesome diseases of ano rectal region. Presentation of the fistula differs in from patient to patient; hence individualized treatment should be tailored. Complex fistula (*Shataponaka Bhagandar*) is a challenging task for medical faculty, due to its complex anatomy involving multiple external and internal openings, extensive branching and recurrent infection. Recurrence of the fistula is a most often occurring complication which may be due to leaving the main tract, inability to find an internal opening or failure to resect all ramifications during the surgery. In *ayurveda Ksharsutra* therapy is supposed to be a gold standard treatment for fistula in ano with negligible rate of incontinence and recurrence. *Ksharsutra* gradually cuts and heals the track, it promote healing due to the antibacterial, cauterizing and healing properties and reducing chances of recurrence. The recurrence rate with *Ksharsutra* is lower as compared to conventional and other surgery. In this single case study, we have successfully treated *Shataponaka Bhagandar* with standard *Apamarga Ksharsutra*. It required total 3 months to cure the fistula completely. Patient is followed up monthly up to 8 months after complete recovery for recurrence. There was no recurrence till date.

Keywords: Fistula in ano, *Shataponaka Bhagandar*, *Apamarga ksharsutra*, Integrative approach.

Introduction

Nadivrana in the perianal region is called *Bhagandar* ^[1]. It's commonly known as fistula-in-ano. It is a chronic anorectal disorder characterized by an abnormal tract between the anal canal and the perianal skin ^[5]. It mostly occurs in a pre-existing anorectal abscess which burst spontaneously. Clinical features of fistula in ano are usually a past history of perianal abscess. Abscess formed and ruptured by itself, the condition healed leaving a tiny discharging sinus. After a few months, abscess formed, ruptured by itself and a discharging opening is left. After a few recurrent attacks the discharge fistula fails to heal and continuous to discharge. Similarly new abscess may form to cause multiple fistulae. Induration, tenderness may present around the fistula track. In *Ayurvedic* literature, this condition is broadly categorized under the term *Bhagandar*, and a specific subtype involving multiple tracts is referred to as *Shataponaka Bhagandar* ^[3]—‘*Shata*’ meaning ‘hundred’ and ‘*ponaka*’ meaning ‘openings’, indicative of the multiple external openings and sinus tracts seen in complex or recurrent cases. *Shataponaka Bhagandar* is challenging due to its complex pathogenesis, high recurrence rate, and resistance to conventional treatment approaches. In modern clinical terms, this aligns with complex or recurrent fistula-in-ano, often involving multiple interconnecting tracts and secondary extensions. The global incidence of fistula-in-ano is estimated

to be approximately 1 to 2 cases per 10,000 populations annually, with a higher prevalence in males between the ages of 30 and 50.

This case study highlights a unique presentation of *Shataponaka Bhagandar*, with multiple external openings and intercommunicating tracts, illustrating both the diagnostic complexity and therapeutic challenges. A comprehensive approach integrating *Ayurvedic* principles and modern diagnostic tools was undertaken for effective management. *Acharya Sushruta* has described about various *Shashtra karma* along with *Anushastra karma*, one of them is *Kshara karma*, and *Acharya Sushruta* advised ‘*Kshar Sutra tam chhindyati*’ ⁴that means excision of fistula tract with *Ksharsutra*. Importance of *Ksharsutra* is due to its effectiveness and low recurrence rates. *Ksharsutra* induces both mechanical and chemical cutting by virtue of the *Kshara* and also help in performing *shodhan* and *ropana karma* of the tract due to its properties of cutting, curetting, draining, penetrating, cleaning, sclerosing and healing. In this patient standard *Apamarga Ksharsutra* was used which was prepared in our institute as per the guidelines stated in the *Sushrut samhita*.

Case Study

A thin built 30 year old male patient attended to shalya OPD of the institute on 14 August 2024.

Case Report

- **Patient Name:** X.Y.Z
- **Age/Sex:** 30 yrs/Male
- **Marital Status:** Unmarried
- **Residence:** Urban area of Amravati
- **Occupation:** Tractor driver
- **Date of Admission:** 10/08/2024
- **Date of Recovery:** 16/11/2024
- **Chief Complaints-**
 - Multiple boil in perianal region since one year
 - Pain with intermittent pus discharge since 6 months

History of Present Illness-

As per the history given, the patient was apparently normal before 12 months. He then developed multiple boils in the perianal region with intermittent history of fever. Later on boils started discharging the pus and gradually the condition of patient had worsened. He had not seek the medical advice. Over the last 5-6 months, the discharge became continuous, accompanied by mild pain, discomfort while sitting and soiling of garments. He had taken treatment from local medical practitioner for that, but didn't get relief. Hence, for further treatment he came to OPD of *Shalyatantra, Pakwasa samanvaya rugnalaya*, Nagpur and get admitted.

Surgical History-

No history of previous surgery related to anorectal region.

Personal History of –

Nature of work: Active

Diet: Mixed

Bowel habit: Irregular

H/O addiction: Tobacco (Kharra) consumption 4-5 times/day

Family History-

No H/O HTN, DM, TB, other major illness.

Socio economical status: Poor

General Examination–

GC – Moderate

Gesture – Thin built

Afebrile

Weight- 48kg

RS: AE=BE, Respiration: 18/min

CVS: S1S2 Normal

CNS: Conscious and well oriented

BP: 120/80mmhg

Pulse: 78/min

Urogenital system: NAD

Digestive system – Loss of appetite, Constipated and hard stool

Local Examination

With the patient in lithotomy position, the findings observed were – presence of multiple external openings in perianal region approximately 2cm to 9cm away from anal verge, Probing was done to confirm site of internal openings.

1st Tract: external opening at 5 O' Clock & Internal opening noted at 6 o' clock position inside the anal canal above the dentate line.

2nd Tract: external opening at 7 O' clock, internal opening at 6 O' clock position,

3rd Tract: external opening 8 O' clock & internal opening at 6 O clock position,

4th Tract: Two external intercommunicating openings at 7 O' clock position, one 7cm away from anal verge and second 9cm away from anal verge, there was no internal opening.

Proctoscopic examination:

On proctoscopic examination no any other anal pathology like Haemorrhoids/Fissure in ano noted.

In this patient perianal region shows multiple black spots (suggestive of healed boil) with no dermatitis or skin excoriation.

After complete examination the diagnosis was confirmed as Fistula in Ano i.e., *Bhagandara*.

Investigations:

Table 1

Investigations	Observed Value	Normal Value
Hb%	11.6 gm %	13.5 – 17.5 gm %
RBS	97 mg/dl	70-140mg/dl
PTINR	1.1	1.2
HIV I & II	Non-Reactive	Non-Reactive
HbsAg	Negative	Negative
Serum Creatinine	0.82 mg %	0.8-1.4 mg %

MRI Fistulogram - suggested that multiple Communicating fistulae tracts are seen in bilateral perianal region. Suspicious Single Internal opening is at about 6 o'clock position (about 2.9cm from anal verge) and then tracts extends on both sides with branches traversing along the supero-lateral and inferior medial aspects (right>left) branches are extending into the right gluteal subcutaneous tissue with multiple ramifications (water can perineum). No abscess formation noted. No supralelevator extension seen. Maximum length of longest tract measures about 9.5cm in length. Fat stranding and facial thickening is noted around. The anal and lower rectum is normal. The adjoining fat planes are intact. The sphincter complex appears normal. The levator Ani muscles appear symmetric. The Ischia-anal and ischio-rectal fossa bilaterally appears normal. The rectum and visualized sigmoid colon are normal. The urinary bladder shows normal physiological distension with regular walls. No intra-luminal radio-opaque calculus or focal lesion is seen. The visualized bones and pelvic soft tissues appear normal.

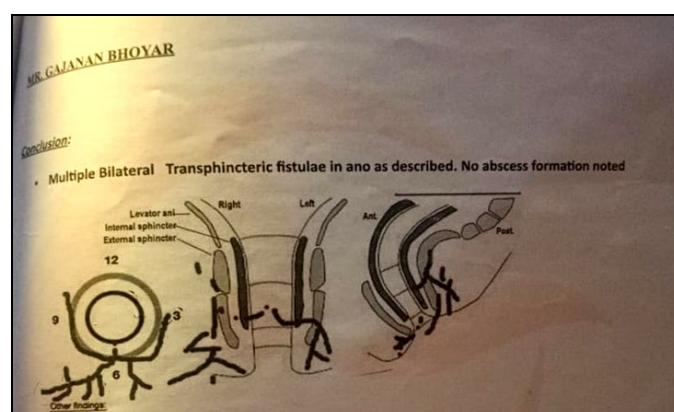


Fig 1: Diagram showing fistulous tracts in the patient:

Pre-operative Management (*Poorva Karma*):

- Proctoclysis enema was given at night before the day of surgery
- Part preparation was done
- Patient Kept NBM for 6 hrs before surgery

- iv). Inj. Tetanus toxoid 0.5ml IM given
v). Bupivacain sensitivity test was done.

Operative Procedure

Under all aseptic precautions, under Spinal anesthesia with patient in lithotomy position, parts painted draped and isolated. Methylene blue dye patency test were done from all external opening (5 O', 7 O', 8 O', 11 O' clock position. Internally dye was seen coming from 6 O' clock position. Probing was done, partial fistulous track was excised, Scooping was done and *kshar sutra* was inserted from external opening to internal opening at the following position: 5 to 6 O' clock, 7 to 6 O' clock, 8 to 6 O' clock, external to external 7 to 7 O' clock position at gluteal region done.. All wound cavities were irrigated with betadine +H2O2 solution followed by normal saline wash. All cavities were then packed with betadine soaked gauze. Packed well and dressing done. Entire operative procedure was uneventful. Patient shifted to recovery room with all vitals stable.

Post-operative Management:

Avagaha sweda (Sitz bath with *Triphala* decoctions) twice a day

Anuloman (laxative): *Triphala churna* was given with luke warm water at bed time to avoid hard stool

Antibiotics: Inj. ceftriaxone 1gm iv BD and Metrogyl 100ml iv TDS for 3 days

Analgesics: Suitable analgesic as per the gradation of pain was given for 3 days

Daily dressing with betadine + H2O2 solution + NS washes

Change of *Ksharsutra* (*Apamarga*) was done weekly.

Dietary modifications based on *Pathya-Apathya* was advised

Vihara Patient was advised to avoid continuous seating on hard surface for long duration, excessive driving etc.

Weekly assessment was done till the healing of fistula in terms of reduction in pain, discharge, inflammation, tenderness & itching.

Observation & Follow up for *Ksharsutra* Ligation

Table 2

Fistula tracts	Length of tract in cm.												
	BT	AT											
		1 st	2 nd	3 rd	4 th	5 th	6 th	7 th	8 th	9 th	10 th	11 th	12 th
Tract no. 1	6.5	6.3	6	5.6	5	4.1	3.2	2.4	0.6	0			
Tract no. 2	6	5.8	5.3	4.5	3.3	2.1	1.2	0.7	0				
Tract no. 3	8	7.9	7.5	7	6.4	5.6	4.7	3.5	2.2	1.5	1	0.5	0
Tract no. 4	5	4.8	4.2	3.5	2.2	0.6	0						

Before, During and After Treatment Photos:



(a) Before Treatment



(b) During Treatment



(c) After Treatment

Discussion

The case highlights the effectiveness of *Apamarg Ksharsutra* therapy in managing complex fistula in ano. The use of *Ayurvedic* modalities, such as *Triphala* decoction and *pathya* based dietary guidance, along with modern medications for early 3 days enhanced wound healing and improved patient's comfort. The multitract nature of fistula addressed efficiently with targeted *Ksharsutra* placement, and no intraoperative or postoperative complications were observed. Overall it required 12 weeks to heal the fistula completely.

Result

The patient showed complete healing of all fistulous tracts with no recurrence during 8 months follow-up. The integrative approach demonstrated effectiveness in managing a complex case of *Shataponaka Bhagandar*, emphasizing the value of *Ayurvedic* interventions in chronic anorectal conditions.

Conclusion

Shataponaka Bhagandar, though rare, poses significant treatment challenges. This case highlights the potential of *Apamarga Kshar Sutra* therapy in managing complex anal fistulas, especially when supported by holistic *Ayurvedic* protocols. A wider application and systematic study could establish its place in integrative clinical practice.

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