



**MINIMALLY INVASIVE PARTIAL FISTULECTOMY WITH KSHARSUTRA  
APPLICATION IN THE MANAGEMENT OF FISTULA-IN-ANO (BHAGANDARA): A  
CASE REPORT**

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### ABSTRACT

Fistula-in-ano is a chronic inflammatory condition characterized by an abnormal tract communicating between the anal canal and perianal skin. It commonly presents with recurrent perianal abscess, pus discharge, pain, itching and discomfort. In Ayurveda, fistula-in-ano can be correlated with Bhagandara, one of the Ashta Mahagada described by Acharya Sushruta. Conventional surgical procedures for fistula-in-ano are often associated with recurrence, delayed wound healing and sphincter damage leading to incontinence. Ksharsutra therapy is an Ayurvedic para-surgical procedure using medicated thread for simultaneous cutting, drainage and healing of fistulous tract. The present case report highlights the successful management of trans-sphincteric fistula-in-ano by minimally invasive partial fistulectomy with Ksharsutra application. A 41-year-old male patient presented with complaints of recurrent perianal boil, pus discharge, constipation and itching since one year. MRI fistulogram confirmed trans-sphincteric fistulous tract in the left anterior perianal region. The patient was treated with partial fistulectomy followed by Ksharsutra application under local anaesthesia. This procedure facilitated proper drainage of pus, reduced wound size and promoted simultaneous cutting and healing. The patient required only 2-3 Ksharsutra changes and achieved complete healing within 4 weeks with minimal postoperative pain and no anal incontinence. The procedure proved to be cost-effective, minimally invasive and associated with low recurrence.

**KEYWORDS:** MRI fistulogram confirmed trans-sphincteric fistulous tract in the left anterior perianal region.

### INTRODUCTION

Bhagandara is one among the Ashta Mahagada explained by Acharya Sushruta. It is considered difficult to treat because of its recurrent nature and involvement of anal sphincters. Clinically, fistula-in-ano is characterized by chronic purulent discharge through an abnormal tract communicating between the anorectal canal and perianal skin.

According to Acharya Sushruta, Bhagandara is classified into five types.

1. Shataponaka Bhagandara – Predominantly caused by Vata Dosha and characterized by multiple openings.

2. Ushtragreeva Bhagandara – Predominantly caused by Pitta Dosha with camel-neck shaped tract and burning sensation.

3. Parisravi Bhagandara – Caused mainly by Kapha Dosha with profuse discharge.

4. Shambukavarta Bhagandara – Tridoshaja type having spiral tract and severe symptoms.

5. Unmargi Bhagandara – Traumatic type caused due to external injury.

In modern surgery, fistula-in-ano is broadly classified into

Low Level Fistula: Low anal fistula involves minimal portion of external anal sphincter and generally includes

intersphincteric and low trans-sphincteric fistulas. These are comparatively easier to manage surgically with lower risk of incontinence.

**High Level Fistula:** High anal fistula involves significant portion of sphincter muscles and includes high trans-sphincteric, suprasphincteric and extrasphincteric fistulas. Management is difficult because aggressive surgery may lead to anal incontinence and recurrence.

Modern surgical procedures such as fistulotomy and fistulectomy are commonly used for management, but recurrence and sphincter injury remain major concerns. Ayurveda offers an effective para-surgical treatment in the form of Ksharsutra therapy. Ksharsutra is a medicated thread coated with herbal drugs having properties of debridement, antimicrobial action and simultaneous healing.

Acharya Sushruta described the use of Ksharsutra in diseases like Nadi Vrana and Bhagandara. Conventional Ksharsutra therapy is highly effective but may require longer healing duration depending on the tract length. Partial fistulectomy with Ksharsutra application is a modified minimally invasive procedure where distal tract is excised surgically while proximal tract is treated using Ksharsutra. This reduces healing time, postoperative discomfort and chances of recurrence while preserving sphincter integrity.

Ayurveda provides an effective para-surgical treatment in the form of Ksharsutra therapy. Ksharsutra is a medicated thread prepared with Apamarga Kshara, Snuhi latex and Haridra powder. Acharya Sushruta described Ksharsutra therapy for diseases like Bhagandara and Nadi Vrana.

Ksharsutra works by gradual cutting, curettage, drainage and simultaneous healing of the fistulous tract. It possesses properties like Chedana, Bhedana, Lekhana and Ropana. The therapy minimizes recurrence and preserves sphincter integrity.

Conventional Ksharsutra therapy is highly effective but may require longer healing duration depending upon tract length. Therefore, minimally invasive partial fistulectomy with Ksharsutra application was adopted in this case. In this modified procedure, distal tract is excised surgically while proximal tract is treated using

Ksharsutra. This reduces wound size, healing duration, postoperative discomfort and chances of recurrence while maintaining sphincter control.

#### CASE HISTORY / PRESENT HISTORY

A 41-year-old male patient came to the OPD of Department of Shalya Tantra with complaints of:

Recurrent perianal boil

Pus discharge

Constipation

Itching in perianal region

On and off symptoms since 1 year

The patient had difficulty performing daily activities due to recurrent discharge and discomfort.

#### INVESTIGATIONS

##### MRI FISTULOGRAM FINDINGS

Trans-sphincteric fistulous tract noted on left side anterior perianal region.

Internal opening present at 1 o'clock position.

External opening present at 3 o'clock position.

Fistulous tract measuring approximately 3 cm and located 3.1 cm from anal verge.

#### PAST HISTORY

No major medical illness.

No significant surgical history.

No relevant family history found.

#### GENERAL EXAMINATION

PR – 80/min

BP – 120/80 mmHg

Temperature – Afebrile

SPO2 – 98%

#### PERSONAL HISTORY

Diet – Mixed

Appetite – Good

Sleep – Sound

Bowel – Constipation present

Addiction – Nil

#### PHYSICAL EXAMINATION

Average built and nourished.

No pallor, icterus, cyanosis or lymphadenopathy.

#### LOCAL EXAMINATION:-

Revealed external opening in left anterior perianal region with pus discharge.





### MATERIALS USED

Apamarga Ksharsutra  
Barber thread  
Probe  
Lignocaine jelly 2% w/w  
Sterile surgical gloves  
Gauze pieces  
Betadine solution  
Syringe and dressing materials

### METHODS/ PROCEDURE

The procedure was carried out under local anaesthesia in lithotomy position after obtaining informed written consent.

### PURVA KARMA

Routine investigations and vitals assessed.  
Informed consent taken.  
Patient prepared in lithotomy position.

### OBSERVATION AND RESULTS

The patient showed progressive improvement following treatment.

Follow up	Clinical observation
Day 0	Immediate postoperative status
After 7 Days	Reduction in pain and discharge
After 14 Days	Healthy granulation tissue observed
After 21 Days	Significant tract healing
After 28 Days	Complete healing achieved
After 35 Days	No recurrence or complications



Local antiseptic dressing and painting done.

### PRADHAN KARMA

Local anaesthesia administered.  
A probe was introduced through the external opening and guided towards the internal opening.

Coring and partial fistulectomy of distal fistulous tract performed till internal sphincter.  
Ksharsutra was then placed in proximal tract through the probe.

Thread secured with reef knot.  
Proper haemostasis maintained.

### PASHCHAT KARMA

Sterile dressing applied.  
Sitz bath and local hygiene advised.  
Ksharsutra changed after every 7 days.  
Follow-up performed regularly.

**Outcome**

Mean operative time: 15–20 minutes

Hospital stay: 1 day

Ksharsutra changes required: 2–3

Unit cutting time: Approximately 7 days/cm

Complete healing within 4 weeks

Minimal postoperative pain (VAS score approximately 1)

No anal incontinence observed

No recurrence during follow-up period

**DISCUSSION**

Bhagandara is predominantly caused due to vitiation of Tridosha with predominance of Vata and Kapha Dosha. The chronic inflammatory process leads to formation of sinus tract with pus discharge and fibrosis. Ksharsutra possesses properties like Chedana, Bhedana, Lekhana and Ropana. It facilitates simultaneous cutting and healing of fistulous tract while maintaining proper drainage. Apamarga Ksharsutra has antimicrobial and debridement properties that help in removal of unhealthy tissue and promote granulation. In conventional Ksharsutra therapy, complete tract healing may take longer due to prolonged cutting process. In this modified procedure, distal tract is excised surgically by partial fistulectomy while proximal tract is managed by Ksharsutra. This significantly reduces healing duration and postoperative discomfort. The minimally invasive approach also reduces wound size and prevents damage to sphincter muscles, thereby minimizing chances of anal incontinence. The procedure proved highly effective in achieving faster recovery with excellent wound healing and low recurrence.

**CONCLUSION**

Partial fistulectomy with Ksharsutra application is an effective minimally invasive procedure for management of fistula-in-ano (Bhagandara). The technique combines advantages of surgical excision and Ksharsutra therapy, resulting in reduced healing time, minimal postoperative pain, preservation of sphincter function and low recurrence rate. The procedure is safe, economical and can be considered as an ideal treatment option for selected cases of trans-sphincteric fistula-in-ano.

“विषाग्निशस्त्राशनिमृत्युकल्पः क्षारो भवत्यल्पमतिप्रयुक्तः ।  
स धीमता सम्यगनुप्रयुक्तो रोगान्निहन्यादचिरेण घोरान् ॥”  
(Sushruta Samhita Su.11/31)

Kshara, when used improperly, acts like poison or weapon; however, when used wisely, it cures severe diseases effectively.

Benefits of this procedure:

Fast recovery

Minimal invasive approach

Cost-effective treatment

Less postoperative pain

Reduced recurrence

Better patient compliance

Preservation of sphincter control.

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