

# A Comparative Study of Rajani Lepa Kshara Sutra and Vibhitaki Kshara Sutra in the Management of Bhagandara (Low Anal Fistula)

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## ABSTRACT:

Bhagadara, which can be triggered by fistula in ano, is characterized as a suppurative secondary ulcerative manifestation to an eruption that typically affects the Bhaga (ano rectal, pelvic rectal, or peri anal region).It is mentioned in Susrutha Samhitha by Asta Mahagadha.Bhagandara's primary nidana is infectious in character, exhibiting symptoms such as discomfort, pus discharge, itching, and tenderness in the perianal area. In today's lifestyle, bhagandara is a frequent condition that is very difficult to cure due to its high recurrence rate and delayed wound healing. In Ayurveda, the kshara sutra is the fundamental principle, while fistulectomy is the current cure. This clinical investigation examines the effectiveness of kshara sutra made with rajani lepa, namely suhi kshera and Haridra Curna in the management of Bagandara. Kshara sutra prepared with rajini lepa is safe and effective treatment option for bagandara, offering a promising alternative to conventional surgical methods

## KEYWORDS:

Bagandara, Fistula-in-ano, Rajini lepa kshara sutra, Vibhitaki kshara sutra

## I. INTRODUCTION:

1. Shalya Tantra was at its extremity in Sushruta's time and the contents of Sushruta Samhita can be compared to any book on surgery written centuries later. Bhagandara (Fistula in ano) is said difficult to be cured and is considered under the Ashta Mahagadas<sup>1</sup>
2. Bhagandara is the nearest disease entity which is described in Ayurveda and which can be equated to fistula in ano. It proceeds with formation of a Pidika (Abscess) that is known as Bhagandara Pidika<sup>2</sup> in the Guda Pradesha (peri-anal area). If proper treatment of Bhagandara Pidika is not employed, it may result in development of Bhagandara. It is

characterized by single or multiple opening around Guda Pradesha with different types of discharge associated with severe pain and discharge. Bhagandara<sup>3</sup>

3. Acharya Sushruta has described surgical approach like excision of fistulous track in detail (S.S.Su 25/3<sup>4</sup>. S.S.Chi 8/42<sup>5</sup>) but also felt the necessity of parasurgical approach like Ksharasutra (S.S.Chi 17/32<sup>6</sup>, C.S.Chi.12/97<sup>7</sup>,Chakradatta-Arsha vyadhiadhikara).
4. Acharya Susrutha mentioned 23 types of plants useful for Kshara karma (Sus.Su 11\11)<sup>8</sup> like Vibhitaki, Palasha, Kutaja, Kadali etc.
5. Kshara Sutra treatment heals the fistulous tract with the integrity of sphincters and the existing data reveal negligible chances of recurrence. Kshara Sutra is a scientifically validated treatment in the management of Bhagandara. The Apamarga Kshara Sutra is well proven to be an effective treatment for fistula in ano and has been standardized by Central Council for Research in Ayurvedic Sciences (CCRAS), an apex research organization of Government of India (GOI) in the field of Indian system of medicine.
6. According to the position of internal opening the fistula is classified into high anal and low anal fistula. The modern surgical management includes Fistulotomy, Fistulectomy, Seton placing, Ligation of Intersphincteric Fistula Tract (LIFT), Fibrin Glues, Advancement Flaps, and Expanded adipose derived Stem Cells (ASCs)<sup>10</sup>.

## AIMS AND OBJECTIVES:

1. To know the role of Kshara Sutra prepared with Snuhi ksheeram and Haridra Churnam in Bhagandhara.
2. To know the role of Standard Vibhitaki Kshara sutra in Bhagandhara.
3. To know differences in the efficacy of Kshara

Sutra prepared with Snuhi ksheeram and Haridra Churnam with standard Vibhitaki kshara sutra in the management of Bhagandhara.

#### **MATERIALS AND METHODS:**

Total 40 Patients were selected from OPD and IPD of S.V.Ayurvedic hospital, Tirupati, Andhra Pradesh.

#### **REQUIRED METATERIALS:**

Haridra churna, Snuhi Ksheera, Vibhitaki Kshara, Barbour surgical linen thread no.20

#### **INCLUSIVE CRITERIA**

1. Patients of irrespective of sex,
2. Patients with age ranging from 20 to 60years,
3. Low Anal Fistula.

#### **EXCLUSIVE CRITERIA**

- Concomitant Ano-rectal conditions like ulcerative colitis, malignancy, Crohn's disease, multiple fistulae and high analfistula
- Pregnancy
- Tuberculosis
- Obstructiveuropathies
- Other systemic disease

#### **Data collection:**

Screening, Selection, Registration and Grouping of 40 patients will be done from the OPD and IPD of SHALYA TANTRA Unit, S.V. Ayurvedic hospital, Tirupati based upon selection criteria (Inclusive and Exclusive Criteria). The selected patients will be divided into two groups i.e., Group-A – Trial Group (Kshara Sutra prepared with Snuhi ksheeram with Haridra churnam) And Group-B – Control Group (Vibhitaki Kshara Sutra), each group comprises 20 patients.

- Sample size -40 Patients
- Grouping- 2 Groups (Groups A & Group B) comprising of 20 patients each
- Distribution of patients among groups – Randomized selection
- Type of the study - Single blind clinical study

#### **INTERVENTION:**

##### **Group A : Trial GROUP**

- 20 patients with symptoms of Bhagadara based on inclusive and exclusive criteria will be selected.
- In this group, the patients are treated with Kshara sutra prepared with Snuhi ksheera and Haridra Churna.

#### **Ingredients:**

- Haridra churnam (Curcuma longa)
- Snuhi ksheeram (Euphorbia nerifolia)
- Barbour Surgical Linen thread no- 20

#### **Preparation of Ksharasutra**

1part of Haridra churna and 1 part of Snuhi ksheera are taken and mixed together in a clean stainless vessel and then apply on Barbour Surgical Linen thread. Daily one coating is applied and then dried. Next day, when the thread is completely dry then another coating will be done and dired again. Likewise totally 7 coating will be done and dried after each coating. Then this fully coated and dried thread will be sterilized in UV radiation.

#### **II. Group B : Control Group:**

- 20 patients with symptoms of Bhagandara based on inclusive and exclusive criteria are selected.
- In this group, the patients are treated with Standard Vibhitaki kshara sutra.

#### **Ingredients:**

- Haridra churnam (Curcuma longa)
- Vibhitaki kshara (Terminalia chebula)
- Snuhi ksheeram (Euphorbia nerifolia)
- Barbour Surgical Linen thread no- 20

#### **I. Material:**

- Malleable probe
- Forceps
- Scissors
- Kshara sutra.

#### **C. Preparation of Vibhithaki Kshara Sutra:**

Barbour Linen Surgical thread no- 20 is fix to the Ksharasutra hangers

- Snuhi ksheera(Euphorbia neriifolia) smeared on the thread with the gauze piece and dried in the Ksharasuta cabin, the same process is repeated for 11 days
- After 11coatings the thread is smeared with snuhi kshira then pass the thread through Vibhitaki Kshara powder and allowed to dry, same process is repeated for 7days
- the thread is smeared with snuhi kshira then pass the thread through Haridra churna (Curcuma longa) and allowed to dry, same process is repeated for 3 days.

- The thread is sterilized with UV light for 30 minutes per day
- Then ksharasutra is sealed in glass test tube.

Stage	Material	coatings
1.	Snuhi Ksheera	11
2.	Snuhi Ksheera + Vibhitaki kshara	07
3.	Snuhi Ksheera+ Haridra Churna	03
4.	Total	21

## II. Method:

Under Anaesthesia, with all aseptic precaution malleable probe will be inserted through external opening and taken out from the internal opening and then kshara sutra will be passed through the probe into tract and then the kshara sutra will be tied neither too tight nor too loose. Wound dressing will be done with gauze sling soaked in Jatyadi Tailam and closed with T-Bandage.

### Clinical Plan

The study will be carried out in three phases

#### I Phase:

- Preparation of Kshara Sutra (Both Trail and Standard).
- Preparation of specific record sheet
- Identification of cases, diagnosis, scrutinizing, registration and grouping

#### II Phase:

- Application of Kshara Sutra under Local Anesthesia and applying the Kshara sutra as per the procedure described above.
- Change of Kshara Sutra will be done on every week till complete cut open of the tract.

#### III Phase:

- Healing of the whole tract.
- Follow up after the complete healing for 2 months with 15 days interval.
- Evaluation, documentation and statistical evaluation will be done.

**1. Duration of the treatment:** Active management till complete cut open of the whole tract.

**2. Progress and follow up.:** Progress of the

patients will be observed for every week and Active follow up will be done for every 15 days upto to 2months

### ASSESSMENTCRITERIA

#### SUBJECTIVEPARAMETERS

- Pain
- Discharge
- Swelling
- Itching

#### OBJECTIVEPARAMETERS

- UCT (Unit Cutting Time)
- Tenderness
- CHT (Complete Healing Time)

### GRADATION OF PARAMETERS

Pain:

- No Pain – 0
- Mild Pain– 1
- Moderate Pain – 2
- Severe Pain – 3

Discharge:

- No Discharge – 0
- Mild Discharge – 1
- Moderate Discharge -2
- Severe (Profuse) Discharge – 3

Swelling

- No swelling - 0
- Mild swelling- 1
- Moderate swelling – 2
- Severe (Profuse) Discharge – 3
- 

Itching:

- No Itching – 0
- Mild Itching – 1
- Moderate Itching -2
- Severe itching - 3

Tenderness:

- No tenderness – 0
- Mild tenderness – 1
- Moderate tenderness -2
- Severe tenderness – 3

**ASSESSMENT CRITERIA**

Criteria for assessment of overall effect

S.No	Criteria for assessment of overall effect of the study	Number of Patients		Percentage of Patients	
		Group A	Group B	Group A	Group B
1	Complete cure	9	2	45	10
2	Moderate improvement	9	1	45	5
3	Marked Improvement	2	13	10	65
4	Mild Improvement	0	4	0	20
5	No Improvement	0	0	0	0
6	Worsened	0	0	0	0

**TABLE SHOWING THE EFFECT OF THERAPY ON SUBJECTIVE PARAMETER IN GROUP A**

PARAMETERS	N	Mean		M.D	% OF RELIEF	S.D		S.E	't'	'df'	'p'
		BT	AT			BT	AT				
PAIN	15	2.13	0.27	1.87	87.32	1.25	0.46	0.322	5.8025	14	<0.0001
DISCHARGE	15	2.0	0.33	1.67	83.5	0.85	0.49	0.252	6.6144	14	<0.0001
SWELLING	15	2.0	0.33	1.67	83.5	0.85	0.49	0.252	6.6144	14	<0.0001
ITCHING	15	2.13	0.27	1.87	87.32	1.25	0.46	0.322	5.8025	14	<0.0001

**TABLE SHOWING THE EFFECT OF THERAPY ON OBJECTIVE PARAMETER IN GROUP A**

PARAMETERS	N	MEAN		M.D	% of Relief	S.D		S.E	't'	'df'	'p'
		BT	AT			BT	AT				
TENDERNESS	15	1.40	0.20	1.20	85.71	1.12	0.41	0.223	5.9233	14	<0.0001
UNIT CUTTING TIME	15	2.13	0.93	1.20	56.34	0.83	0.80	0.107	11.2250	14	<0.001

**TABLE SHOWING THE EFFECT OF THERAPY ON SUBJECTIVE PARAMETER IN GROUP B**

PARAMETERS	N	Mean		M.D	% of RELIEF	S.D		S.E	't'	'df'	'p'
		BT	AT			BT	AT				
PAIN	15	2.0	1.0	1.0	50	1.46	1.13	0.378	2.6458	14	<0.0001
DISCHARGE	15	2.0	0.33	1.67	65.21%	0.85	0.49	0.126	13.228	14	<0.0001
SWELLING	15	2.0	0.33	1.67	65.21%	0.85	0.49	0.126	13.228	14	<0.0001
ITCHING	15	2.0	1.0	1.0	50	1.46	1.13	0.378	2.6458	14	<0.0001

**TABLE SHOWING THE EFFECT OF THERAPY ON OBJECTIVE PARAMETER IN GROUP B**

PARAMETERS	N	MEAN		M.D	% of Relief	S.D		S.E	't'	'df'	'p'
		BT	AT			BT	AT				
TENDERNESS	15	1.20	0.27	0.93	77.5	0.94	0.46	0.182	5.1366	14	<0.0001
UNIT CUTTING TIME	15	2.13	0.33	1.80	77.25	0.92	0.49	0.279	6.4411	14	<0.0001

**TABLE COMPARISON OF OVERALL % OF RELIEF PER PARAMETER OF 2 GROUPS**

PARAMETERS	% OF RELIEF	
	GROUP A	GROUP B
PAIN	87.32%	50%
DISCHARGE	83.5%	65.25%
SWELLING	83.5%	65.21%
ITCHING	87.32%	50%
TENDERNESS	85.71%	77.5%
UNIT CUTTING TIME	56.34%	77.25%

**TABLE Shows Statistical Analysis in Objective Pameters**

Mean	Group A		Group B	
	Initial Length	CHT	Initial Length	CHT
CHT	2.5 cms	19.35 Days	2.56 cms	20.1 Days

**II. DISCUSSION:**

Due to its high recurrence incidence and prolonged wound healing, bhagandara, a disorder marked by suppurative ulceration in the anorectal area, presents considerable hurdles in modern medicine. Unsatisfactory results are frequently the result of the present treatment choices, which include fistulectomy but frequently neglect to address the underlying causes of the problem. On the other hand, the Ayurvedic method, which stresses the application of Kshara Sutra, presents a viable substitute.

Our research shows that Kshara Sutra made with Rajani Lepa is safe and effective in treating Bhagandara. The notable amelioration of symptoms and wound healing, in conjunction with the lack of serious problems, indicate that this therapy approach may constitute a beneficial supplement to the current arsenal against Bhagandara.

The benefits of Kshara Sutra made with Rajani Lepa include its capacity to accelerate wound healing, lessen inflammation, and

encourage drainage. The herbal constituents in Rajani Lepa have antibacterial and anti-inflammatory qualities, which probably help it effectively manage the infectious aspect of Bhagandara.

**III. CONCLUSION:**

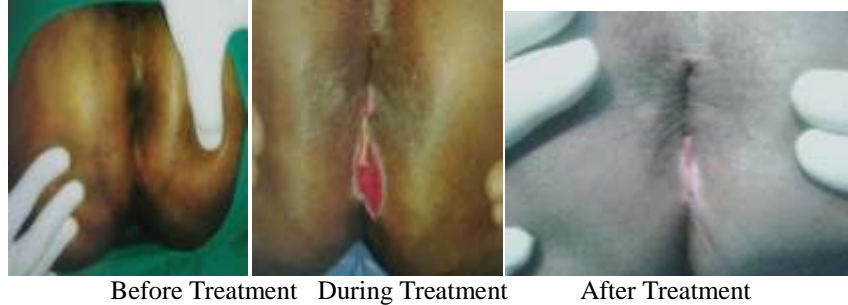
In conclusion, the Rajani lepa Kshara sutra's method of treating fistula-in-ano is straight forward, uncomplicated, and secure. Most significantly, the cost of therapy is really minimal, and there are very little risks of anal incontinence and recurrence. Because the treatment is ambulatory, the patient can start working right away. Rajani lepa kshara sutra is therefore a better option than kshara sutra since it has less postoperative issues and is easier to apply. It is also less expensive. One of the main benefits of this treatment is the repair of bhagandhara without scarring and the restoration of the unrestricted anal route. It has the potential to delay or prevent surgery.

**GROUP A**



Before Treatment      During Treatment      After Treatment

GROUP B



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