



## A COMPARATIVE CLINICAL STUDY OF KARANJA KSHARA SUTRA AND PALASHA KSHARA SUTRA IN BHAGANDARA W.S.R TO LOW LEVEL FISTULA-IN-ANO

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### ABSTRACT

Bhagandara (Fistula in ano) are said callous to be cured and among them Bhagandara is considered under the Ashtamahaagad (Eight grave disorders). Bhagandara (fistula-in-ano) is one of the oldest diseases known to the medical science. Fistula in ano at modern parlance is a common anorectal condition prevalent in the populations worldwide and its prevalence is second highest after haemorrhoids. This global problem is being managed by specialized proctologists and general surgeons at different renowned medical centers but; in spite of the best possible efforts, recurrence rate (20-30%) still remains, as a big challenge in front of the medical as well as surgical world. Hence, to find out an alternative to Apamarga Kshara Sutra Karanja and Palash Kshara Sutra are opted for the clinical evaluation.

**KEYWORDS :** Bhagandara, Fistula in ano, Kshara Sutra

### INTRODUCTION

Ayurveda is an age old science and Shalya Tantra by Acharya Sushruta written as Sushruta Samhita can be compared to any book on surgery written centuries later. A number of shining examples may be quoted and one of these is that the surgical training imparted at that time to the students was excellent in designing the model to create active interest in the subject with highest regard to the welfare of the patients. In context of Chikitsa has described almost all sorts of surgical managements and some they still have no comparison. More over in regards of anorectal and perineal surgery, he has expounded much and equal emphasis is given to surgical as well as para surgical measures. Anorectal diseases like Arsha (Piles) and Bhagandara (Fistula in ano) are said callous to be cured and among them Bhagandara is considered under the Ashta Mahaarogas (Eight grave disorders). Bhagandara<sup>1</sup> (fistula-in-ano) is one of the oldest diseases known to the medical science. Fistula in ano at modern parlance is a common anorectal condition prevalent in the populations worldwide and its prevalence is second highest after haemorrhoids.

According to a recent study conducted on the prevalence of anal fistula in a London hospital by Sainio P, considering the incidences and epidemiological aspects for Fistula-in-ano in a defined population; approximately 10% of all patients and 4% of new patients were reported to suffer from this disease. A similar study in India has been reported anal fistula to constitute 15-16% of all ano rectal surgical admissions<sup>2</sup>. This global problem is being managed by specialized proctologists and general surgeons at different renowned medical centers but; in spite of the best possible efforts, recurrence rate (20-30%) still remains, as a big challenge in front of the medical as well as surgical world. As per the general observations of the patient flow and data of anorectal disorders collected from Shalya Tantra department of R.D memorial Ayurveda PG college and hospital, Bhopal, more than 15% patients are found suffering from Bhagandara (fistula-in-ano). Among them recurred, refused and complicated cases constituted more than 5%, while rest of the cases was found fresh.

Kshara Sutra therapy can be done in a small setup with a minimal equipment and instruments and moreover the patients remain ambulatory during the whole course of treatment, is an additional advantage in comparison to conventional therapy for fistula in ano. It is such a simple, safe and sure shot treatment for anal fistula. Kshara Sutra as a part

of Kshara karma has been proven as an effective and as a first choice of treatment. It is becoming universally acceptable day by day. The Indian Council of Medical Research (ICMR) has validated and is also under active consideration of the WHO for its globalization. Now this type of therapy is being considered as a minimal invasive para surgical measure at global level. Considering this, CCRAS – Dept of AYUSH has launched national campaign on Kshara Sutra in August 2007 and has recommended establishing a Kshara Sutra clinic at each P.H.C. level hospitals in all over India. The Apaamaarga Kshara Sutra is well proven device in the management of fistula in ano and has been standardized by the CCRAS<sup>3</sup>. It is quiet difficult to solely depend upon Apaamaarga only because of its limited availability globally. India is a vast country, with varied Flora, so there is also a need for search of the alternate plants which may play the same or better role as Apaamaarga Kshara in the preparation of Kshara Sutra. So, two such plants, Karanja (Naktamaala) and Palasha<sup>4</sup> were selected as an alternate for preparing Kshara Sutra under this study. Sushruta has advocated Karanja and Palasha as Kshara drugs. Hence, to find out an alternative to Apamarga Kshara Sutra Karanja and Palash Kshara Sutra are opted for the clinical evaluation.

### Aim & Objectives

1. To study in detail Bhagandara.
2. To study the effect of Karanja Kshara Sutra in Bhagandara.
3. To study the effect of Palash Kshara Sutra in Bhagandara.
4. To compare the effect of Karanja Kshara Sutra and Palash Kshara Sutra in Bhagandara.

### MATERIAL AND METHOD

#### Source Of Data

Patients who attended the O.PD and I.PD, Department of Shalya Tantra of Rani Dullliaya Smriti Ayurvedic P.G. College and Hospital, Bhopal, were screened. Among them 63 patients fulfilling the inclusion criteria of the present study were taken. Detailed history taking and physical examinations were carried out in these patients. Relevant data were registered in the designed case proforma. 3 patients were LAMA.

#### Inclusion Criteria

1. Patients aged between 20-70 years, irrespective of sex, religion and caste.
2. Patients with classical sign and symptom of Bhagandara w.s.r. to Low level Fistula-In-Ano.
3. Patients free from any other systemic diseases.

**Exclusion Criteria**

1. Patients of Bhagandara with the history of H.I.V, Hepatitis B, T.B, Malignancy, Liver cirrhosis, I.H.D etc. will be excluded.
2. Patients suffering from any other systemic diseases.
3. Patients aged below 20 and above 70 years.

**Criteria of Assessment**

❖ **Subjective Criteria**

- Pain
- Itching

❖ **Objective Criteria**

- Swelling
- Discharge
- Size of Track

**Table: Subjective Parameters**

**1) Pain**

Grade	Score
No pain	0
Pain after defecation	1
Pain after defecation which continues for whole day	2
Continues pain whole day and night	3

**2) Itching**

Grade	Score
No Itching	0
Itching only after defecation	1
Itching 2-3 times in a day	2
Continuous itching throughout the day	3

**Table: Objective Parameters**

**1) Swelling**

Grade	Score
No Swelling	0
Swelling within 0.5-1 c.m	1
Swelling within 1-2 c.m	2
Swelling more than 3 c.m	3

**2) Discharge**

Grade	Score
No discharge	0
Mild (If wound track wets 1x1cm gauze piece)	1
Moderate (If wound track wets 2x2cm gauze piece)	2
Severe (If wound track wets more than 2x2cm gauze piece, with continuous and profuse discharge)	3

**3) Size Of Track**

Grade	Score
No Track formed	0
Track size 0-2 cm in length.	1
Track size 2-4 cm in length.	2
Track size more than 4 cm in length.	3

For assessing the improvement of symptomatic relief and to analyze statistically, the observations was recorded before, after the treatment and after the follow ups. The mean percentage, S.D, SE and t-value (paired) were calculated.

**Laboratory Investigation**

1. Urine- Routine and Microscopic examination
2. Blood- CBC, ESR, BT&CT, RBS, HIV and HbsAg.
3. Pus for- Culture and sensitivity (if necessary)
4. Radiological- Fistulogram (if necessary), Chest X-Ray P/A view (if necessary)
5. Histo-Pathological examination- Biopsy (if necessary) If needed other investigation were done.

**Method Of Kshar Sutra Bandana And Its Standard Operating Procedure (sop)**

**Procedure In Group – A**

**Poorva Karma-**

1. Written Informed Consent was taken.
2. Part Preparation was done.
3. Patient was kept nil orally for 6 hours.
4. Inj. Tetanus Toxoid, 0.5 ml, I/M was given if needed.
5. Inj. xylocaine sensitivity test was done
6. Soap Water Enema was given twice, around 10 pm at previous day night and around 7 am on the day of operation.
7. Preparation of operation theatre & sterilization of Instruments were done before hand.

**Pradhana Karma**

The patient was kept in lithotomy position, perianal region was cleaned with antiseptic lotions and draping was done. Local anesthesia was used and it was given after keeping the patient in lithotomy position. When the patient was assured, gloved index finger was gently introduced into the rectum and a suitable metallic probe was passed through the external opening of the fistula. The probe was forwarded along the path of least resistance to reach into the lumen of anal canal through the internal opening, guided by the finger of the other hand inserted in to the rectum and the tip of probe was finally directed to come out of the anal orifice. Then a suitable length of Kshara Sutra was taken and threaded into the eye of the probe. Thereafter, the probe was pulled out through the anal orifice, to leave the Kshara Sutra in situ i.e. in the fistulous tract. The two ends of the Kshara Sutra were tied together with keeping the gap about of index finger outside the anal canal. After this a gauze piece (surgical pad) was applied to the anal region and tied with the help of T-bandage and patient was shifted to the post-operative ward.

**Paschata Karma**

1. Patient was kept nil orally till complete waving off of the anesthetic effect is achieved i.e. maximum for 6 hours.
2. I/V fluids were given as per the requirement.
3. Suitable analgesic & antibiotics were administered as per the requirement.

**Change Of Kshara Sutra**

**Changing The Thread (Rail – Road Method)**

1. On every seventh day, the Kshara Sutra was changed with a new thread by the rail-road method. In this method, the Kshara Sutra was tied at one end and the knot tightened against the knot of the thread in situ. The Kshara Sutra at the anal verge was clamped with forceps and cut in between the knot and forceps. The forceps was slowly pulled out.
2. The new Kshara Sutra was replaced by the old one. The knot of the new Kshara Sutra was secured. The measurement of the old thread was recorded finally to assess the progress. The patients were advised to take rest for some time and then allowed to go back for their routine work. This method of changing the Kshara Sutra is known as rail-road method.

**Table: Assessment Of Total Effect Of Therapy**

Complete remission	100% relief in signs and symptoms
Marked improvement	75-99% relief in signs and symptoms.
Moderate improvement	50-74% relief in signs and symptoms.
Mild improvement	25-49% relief in signs and symptoms.
Unchanged	No change in signs and symptoms.

**Duration Of Treatment**

Till the Kshara Sutra gets cut through the tract completely. Total 60 patients were divided into two groups  
 Group A: 30 patients were treated with Karanja Kshar Sutra.  
 Group B: 30 patients were treated with Palash Kshara Sutra.

**Follow Up Period**

Follow up was done on 30 th day of surgery and 7<sup>th</sup> day after that for two times. For each follow-up visit, the patients were examined for any recurrence of disease or any associated lesion of the anorectal region.

**Follow Up Study**

**Assessment**

1. I<sup>st</sup> assessment after surgery was done on the second day of surgery.
2. II<sup>nd</sup> assessment or 1<sup>st</sup> follow up was done on 30<sup>th</sup> day after first assessment.
3. III<sup>rd</sup> assessment or 2<sup>nd</sup> follow up was done on 45<sup>th</sup> day after second assessment.

**OBSERVATION AND RESULTS**

In the present study, 60 patients suffering from Bhagandara fulfilling the inclusion criteria were studied and were randomly selected. All statistical data were taken out by doing t-test.

**Group A- 30 Patients Were Treated With Karanja Kshara Sutra.**

**Group B- 30 Patients Were Treated With Palash Kshara Sutra.**

**Table: Showing Incidence Of Sex Of Patients With Bhagandara**

Sex	A		B		Total	%
	N= 30	%	N= 30	%		
Male	29	96.67	30	100	59	98.33
Female	01	3.33	00	0	01	1.67

Ratio of Male is more in both the Groups i.e., 98.33%.

**Distribution Of 60 Patients Of Bhagandara According To Age Group**

Age group	A		B		Total	%
	N= 30	%	N= 30	%		
20-30 years	01	10%	6	20%	07	11.67%
31-40 years	12	36.66%	9	30%	21	35%
41-50 years	10	26.66%	7	23.33%	17	28.33%
51-60 years	06	20%	8	26.67%	14	23.33%
61-70 Year	01	3.33%	0	0%	01	1.67%

In this study maximum patients were of the age group 31 to 40.

**Distribution Of 60 Patients Of Bhagandara According To Religion**

Religion	A		B		Total	%
	N=30	%	N=30	%		
Hindu	30	100	30	100	60	100
Muslim	0	0	0	0	0	0
Christian	0	0	0	0	0	0

All patients are Hindu i.e., 100%.

**Distribution Of 60 Patients Of Bhagandara According To Socio- Economic Status-**

Socio-Economic Status	A		B		Total	%
	N=30	%	N=30	%		
Poor	06	20	06	20	12	20
Middle class	24	80	23	76.67	47	78.33
Upper class	00	0	01	3.33	01	1.67

Maximum patients belong to Middle Class i.e., 78.33%.

**Distribution Of 60 Patients Of Bhagandara According To Marital Status**

Marital Status	A		B		Total	%
	N=30	%	N=30	%		
Married	24	80	22	73.33	46	76.67

Unmarried	06	20	08	26.67	14	23.33
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Maximum patients in the study were married i.e., 76.67%.

**Distribution Of 60 Patients Of Bhagandara According To Educational Qualification**

Education	A		B		Total	%
	N=30	%	N=30	%		
Illiterate	00	0	01	3.33	01	1.67
Primary	02	6.66	03	10	05	8.33
Secondary	05	16.67	03	10	08	13.33
Higher secondary	13	43.33	14	46.67	27	45
Graduate	08	26.67	06	20	14	23.33
Post- Graduate	02	6.67	03	10	05	8.33

Maximum patients in the study were only higher secondary pass i.e., 45%.

**Distribution Of 60 Patients Of Bhagandara According To Appetite**

APPETITE	A		B		Total	%
	N= 30	%	N= 30	%		
GOOD	03	10	05	16.67	08	13.33
MODERATE	15	50	14	46.67	29	48.33
POOR	12	40	11	36.67	23	38.33

Maximum patients in the study had Moderate Appetite i.e., 48.33%.

**Distribution Of 60 Patients Of Bhagandara According To Bowel**

BOWEL	A		B		Total	%
	N=30	%	N=30	%		
Regular	08	26.67	6	20	14	23.33
Irregular	22	73.33	24	80	46	76.66

Maximum patients in the study had irregular bowel habit i.e., 76.66%.

**Distribution Of 60 Patients Of Bhagandara According To Nature Of Work**

NATURE OF WORK	A		B		TOTAL	%
	N=30	%	N=30	%		
SITTING	19	63.33	22	73.33	41	68.33
STANDING	7	23.33	6	20	13	21.67
WALKING	4	13.33	2	6.67	6	10

Maximum patients in the study had sitting job i.e., 68.33%

**Distribution Of 60 Patients Of Bhagandara According To Addiction**

HABITS	A		B		TOTAL	%
	N=30	%	N=30	%		
Smoking	8	26.66	4	13.33	12	20
Tobacco	10	33.33	06	20	26	43.33
Alcohol	17	56.67	14	46.67	31	51.67
Other	05	16.67	04	13.33	09	09

Maximum patients in the study had Alcohol habit i.e., 51.67%.

**Distribution Of 60 Patients Of Bhagandara According To Diet**

DIET	A		B		TOTAL	%
	N=30	%	N=30	%		
Veg.	11	36.67	14	46.66	25	41.67
Non-Veg.	19	63.33	16	53.33	35	58.33

Maximum patients in the study were Non-Vegetarians i.e, 58.33%.

**Distribution Of 60 Patients Of Bhagandara According To Occupation**

OCCUPATION	A		B		TOTAL	%
	N=30	%	N=30	%		
Student	02	6.67	02	6.67	04	6.67
Farmer	03	10	02	6.67	05	8.33

Housewife	02	6.67	02	6.67	04	6.67
Labour	07	23.33	08	26.67	15	25
Businessman	10	33.33	10	33.33	20	33.33
Service	06	20	06	20	12	20

In the study maximum number of patients is housewives i.e., 25% and Businessman i.e., 33.33%.

**Effect Of Karnaja Kshara Sutra Over Bhagandara  
Effect Of Karanja Kshara Sutra On Pain**

SYMPTOM	MEASURES				%	S.D (+)	S.E (+)	t value	p value
	B.T			B.T-A.T					
PAIN	1.83	A.T	1.73	0.1	5.4	0.52	0.10	2.1120	<0.001
		FU1	0.20	1.63	89.07	0.48	0.09	2.2622	<0.001
		FU2	0.13	1.7	92.8	0.36	0.06	18.2283	<0.0001

Statistical analysis showed that the mean score which was 1.83 before the treatment was reduced to 1.73 after the treatment with 5.4% improvement. After the first follow up it became 0.20 with 89.07% improvement. And after second follow up the change was 0.13 with 92.8% improvement. The change was statistically significant with P<0.0001.

**Karanja Kshara Sutra On Itching**

SYMPTOM	MEASURES				%	S.D (+)	S.E (+)	t value	p value
	B.T			B.T-A.T					
ITCHING	1.57	A.T	1.53	0.04	2.55	0.51	0.09	2.6926	<0.001
		FU1	0.33	1.24	78.98	0.48	0.09	3.8079	<0.001
		FU2	0.20	1.37	87.26	0.41	0.07	16.5513	<0.0001

Statistical analysis showed that the mean score which was 1.57 before the treatment was reduced to 1.53 after the treatment with 2.55% improvement. After the first follow up it became 0.33 with 78.98% improvement. And after second follow up the change was 0.20 with 87.26% improvement. The change was statistically significant with P<0.0001.

**Effect Of Karanja Kshara Sutra On Swelling**

SYMPTOM	MEASURES				%	S.D (+)	S.E (+)	t value	p value
	B.T			B.T-A.T					
SWELLING	1.82	A.T	1.80	0.02	1.09	0.70	0.13	2.4083	<0.001
		FU1	0.33	1.49	81.87	0.68	0.12	6.9660	<0.0001
		FU2	0.20	1.62	89.02	0.38	0.07	14.3670	<0.0001

Statistical analysis showed that the mean score which was 1.82 before the treatment was reduced to 1.80 after the treatment with 1.09% improvement. After the first follow up it became 0.33 with 81.87% improvement. And after second follow up the change was 0.20 with 89.02% improvement. The change was statistically significant with P<0.0001.

**Effect Of Karanja Kshara Sutra On Discharge**

SYMPTOM	MEASURES				%	S.D (+)	S.E (+)	t value	p value
	B.T			B.T-A.T					
DISCHARGE	1.83	A.T	1.77	0.06	3.27	0.63	0.11	2.9709	<0.001
		FU1	0.3	1.53	83.61	0.47	0.09	3.5254	<0.001
		FU2	0.23	1.6	87.43	0.43	0.08	15.4560	<0.0001

Statistical analysis showed that the mean score which was 1.83 before the treatment was reduced to 1.77 after the treatment with 3.27% improvement. After the first follow up it became 0.30 with 83.61% improvement. And after second follow up the change was 0.23 with 87.43% improvement. The change was statistically significant with P<0.0001.

**Effect Of Karanja Kshara Sutra On Size Of Track**

SYMPTOM	MEASURES				%	S.D (+)	S.E (+)	t value	p value
	B.T			B.T-A.T					
	1.87	A.T	1.87	0	0	0.78	0.14	1.7951	<0.001
		FU1	0.13	1.74	93.05	0.35	0.06	2.1122	<0.001
		FU2	0.10	1.77	94.65	0.31	0.06	13.1741	<0.0001

SIZE OF TRACK	1.87	A.T	1.87	0	0	0.78	0.14	1.7951	<0.001
		FU1	0.13	1.74	93.05	0.35	0.06	2.1122	<0.001
		FU2	0.10	1.77	94.65	0.31	0.06	13.1741	<0.0001

Statistical analysis showed that the mean score which was 1.87 before the treatment was reduced to 1.87 after the surgery with 0% improvement. After the first follow up it became 0.13 with 93.05% improvement. And after second follow up the change was 0.10 with 94.65% improvement. The change was statistically significant with P<0.0001.

**Overall Effect Of Karanja Kshara Sutra Over Bhagandara  
Table: Showing The Overall Effect Of Karnaja Kshara Sutra Over Bhagandara:**

Category	No. of Patients	%
Complete remission	0	0%
Marked improvement	30	100%
Moderate improvement	0	0%
Mild improvement	0	0%
Unchanged	0	0%

**Overall Effect**

Consideration of overall effects provided by Karanja Kshara Sutra over Bhagandara showed no patients with complete remission, marked improvement was found in 100% patients. There were no patients with moderate improvement, mild improvement or in unchanged group.

**Effect Of Palash Kshara Sutra Over Bhagandara  
Table: Effect Of Palash Kshara Sutra On Pain**

SYMPTOMS	MEASURES				%	S.D (+)	S.E (+)	t value	p value
	B.T			B.T-A.T					
PAIN	1.60	A.T	1.60	0	0	0.41	0.07	5.1555	<.0001
		FU1	0.33	1.27	79.4	0.60	0.60	11.9477	<.0001
		FU2	0.27	1.33	83.13	0.55	0.10	13.3589	<.0001

Statistical analysis showed that the mean score which was 1.60 before the treatment was reduced to 1.60 after the treatment with 0% improvement. After the first follow up it became 0.33 with 79.4% improvement. And after second follow up it was 0.27 with 83.13% improvement. The change was statistically significant with P<0.0001.

**Palash Kshara Sutra On Itching**

SYMPTOM	MEASURES				%	S.D (+)	S.E (+)	t value	p value
	B.T			B.T-A.T					
ITCHING	1.67	A.T	1.27	0.4	23.95	0.58	0.11	3.7874	<0.001
		FU1	0.57	1.1	65.86	0.57	0.10	10.6334	<0.0001
		FU2	0.40	1.27	76.05	0.56	0.10	12.3501	<0.0001

Statistical analysis showed that the mean score which was 1.67 before the treatment was reduced to 1.27 after the treatment with 23.95% improvement. After the first follow up it became 0.57 with 65.86% improvement. And after second follow up the change was 0.40 with 76.05% improvement. The change was statistically significant with P<0.0001.

**Effect Of Palash Kshara Sutra On Swelling**

SYMPTOM	MEASURES				%	S.D (+)	S.E (+)	t value	p value
	B.T			B.T-A.T					
SWELLING	1.30	A.T	1.30	0	0	0.61	0.11	3.2474	<.001
		FU1	0.33	0.97	74.62	0.48	0.09	3.8079	<.001
		FU2	0.27	1.03	79.23	0.45	0.08	15.6410	<.0001

Statistical analysis showed that the mean score which was 1.30 before the treatment was reduced to 1.30 after the treatment with 0% improvement. After the first follow up it became 0.33 with 74.62% improvement. And after second follow up it reduced to 0.27 with 79.23% improvement. The change was statistically significant with P<.0001.

**Effect Of Palash Kshara Sutra On Size Of Track**

SYMP-TOM	MEASURES				%	S.D (+)	S.E (+)	t value	p value
	B.T	A.T	B.T	A.T					
SIZE OF TRACK	1.53	0.27	0.13	0.10	0.00	0.56	0.10	3.0438	<0.001
	FU1	0.27	1.26	82.35	0.45	0.08	0.08	15.3844	<0.0001
	FU2	0.13	1.4	91.50	0.35	0.06	0.06	22.1257	<0.0001

Statistical analysis showed that the mean score which was 1.53 before the treatment was reduced to 1.53 after the treatment with 0% improvement. After the first follow up it became 0.27 with 82.35% improvement. And after second follow up the change was 0.13 with 91.50% improvement. The change was statistically significant with P<0.0001.

**Overall Effect Of Palash Kshara Sutra Over Bhagandara- Table: Showing The Overall Effect Of Palash Kshara Sutra Over Bhagandara:**

Category	No. of Patients	%
Complete remission	0	0%
Marked improvement	30	100%
Moderate improvement	0	0%
Mild improvement	0	0%
Unchanged	0	0%

**Overall Effect**

Consideration of overall effects provided by Palasha Kshara Sutra over Bhagandara showed no patients with complete remission, marked improvement was found in 100% patients. There were no patients with moderate improvement, mild improvement or in unchanged group.

**Comparative Results Of Karanja Kshara Sutra And Palash Kshara Sutra On Bhagandara**

Characteristic	Karanja Kshara Sutra			Palasha Kshara Sutra		
	Mean score	% of relief	% of relief	Mean score	% of relief	% of relief
PAIN	1.83	0.13	92.80%	1.60	0.27	83.13%
ITCHING	1.57	0.20	87.26%	1.67	0.40	76.05%
SWELLING	1.82	0.20	89.02%	1.30	0.27	79.23%
DISCHARGE	1.83	0.23	87.43%	1.70	0.40	76.74%
SIZE OF TRACK	1.87	0.10	94.65%	1.53	0.13	91.50%

**Overall Assessment Of Treatment Of Bhagandara Done By Karanja Kshara Sutra And Palasha Kshara Sutra**

Category	No. of patients in A group	%	No. of patients in B group	%
Complete remission	0	0%	0	0%
Marked improvement	30	100%	30	100%
Moderate Improvement	0	0%	0	0%
Mild Improvement	0	0%	0	0%
Unchanged	0	0%	0	0%

**CONCLUSION**

- Bhagandara is the presence of a discharging Varna within two-finger vicinity of anal canal with a history of an Pidaka, which many times bursts, heals and reoccurs which is a painful condition of the peri-anal region.
- Acharya Charaka, Acharya Sushruta and Acharya Chakradatta told Kshara Sutra chikitsa in Bhagandara roga. Kshara Sutra preparation was first classically described by Acharya Chakradatta.
- Upon Analysis for pH of both the Kshara, P<sup>h</sup> of Karanja Kshara Sutra was 10.5 And P<sup>h</sup> of Palash Kshara Sutra was 9.8
- All the patients in both the groups showed the marked improvement no complete remission or no mild improvement. So it can be said that both groups are equally effective in treating the Bhagandara condition.
- Upon comparing the percentage of improvement Karanja Kshara is bit more effective than Palash Kshara in all the Lekhana of Bhagandara.

- The reason of the better efficacy of the Karanja Kshara can be the higher pH of the Karanja than the Palash Kshara.
- Karanja is having wound healing property, so it can be more beneficial than Palash

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