



## Research Article

www.ijrap.net (ISSN:2229-3566)



### A COMPARATIVE CLINICAL STUDY ON THE EFFICACY OF APAMARGA AND PALASHA PRATISARANEYYA KSHARA IN ARSHAS

Aiyanna P. P.<sup>1\*</sup>, Poornima Jalawadi<sup>1</sup>, Harshavardhana K<sup>2</sup>, Deenaprakash Bharadwaj<sup>2</sup>

<sup>1</sup> Assistant Professor, Department of PG studies in Shalya Tantra, JSS Ayurveda Medical College, Mysore, Karnataka, India

<sup>2</sup> Professor, Department of PG studies in Shalya Tantra, KVG Ayurveda Medical College, Sullia, Karnataka, India

Received on: 17/11/20 Accepted on: 05/12/20

\*Corresponding author

E-mail: draiyanna@gmail.com

DOI: 10.7897/2277-4343.1106183

#### ABSTRACT

Ever since the evolution of the species Homo sapiens, anal problems have been a source of constant anxiety. Contrarily there seems to be an increasing incidence of the commonest of all anal disease, i.e. Arshas, a kind of disease which is very unkind towards mankind. Ayurvedic literatures have described Arshas as Mahagada and can be compared to Haemorrhoids in modern medicine. The various therapies show that there is no universally acceptable technique in the management of Haemorrhoids and also these have many side effects and demerits. Pratisaraneeya Kshara the alkaline group of medicinal substances has been emphasized throughout the classical literature for Arshas, as a substitute for surgical procedure and can be used safely in patients who are afraid of surgery, old and weak also. This work includes preparation of Apamarga and Palasha Pratisaraneeya Ksharas; evaluation of the efficacy of Apamarga and Palasha Pratisaraneeya Kshara and comparing the results in the management of Arshas. The effects of Apamarga Pratisaraneeya Kshara and Palasha Pratisaraneeya Kshara were evaluated clinically in 30 patients, 15 in each group randomly divided. The study concluded that in patients suffering from Arshas both Apamarga Pratisaraneeya Kshara and Palasha Pratisaraneeya Kshara showed statistically highly significant results ( $p < 0.001$ ) in terms of the improvement in Mass per rectum, Pain and Size of pilemass and 80% of the patients treated with Apamarga Pratisaraneeya Kshara got complete remission from the disease, while with Palasha Pratisaraneeya Kshara 46.7% patients showed complete remission. Though there won't many differences statistically, the comparison of individual criteria 's percentage and the relief obtained, Apamarga Pratisaraneeya Kshara showed an upper hand in managing the Arshas.

**Keywords:** Arshas, Apamarga, Palasha, Pratisaraneeya Kshara.

#### INTRODUCTION

Arshas is the commonest disease of ano-rectal region which is most unkind towards mankind. It has tormented the human race since Vedic age. All Ayurvedic literatures have dealt with Arshas in detail and described it as disease which tortures the person just like an enemy<sup>1</sup>, which anguishes patient's vital force or prana and categorized as Mahagada.<sup>2</sup>

Arshas can be compared with Haemorrhoids in modern proctology, the commonest ailment is a gift of erect posture, sedentary lifestyle, inconsistent and inappropriate diet of current day humans. It is difficult to obtain any accurate figure about its incidence. But clinical experiences suggest that many people of both genders suffer from haemorrhoids. A large proportion of the world population is troubled with haemorrhoids and efforts have been made all over the world to combat the condition through different modalities of treatment. Several surgical/ conventional therapies like rubber band ligation, cryosurgery, photo coagulation Sclerotherapy, injection therapy, haemorrhoidectomy and so on are now in practice for Haemorrhoids and not all of them have been uniformly successful. The various therapies show that there is no universally acceptable technique in the management of Haemorrhoids and also these have many side effects and demerits.

Treatment of ano rectal diseases through Ayurveda is very potent and gaining popularity. People have started realizing that Ayurveda has its potential in treating these diseases. Acharya Sushruta pioneer in the field of surgery has methodologically

enumerated the disease and recommended fourfold measure in the management of Arshas which are widely acceptable and more practical even today. That is Bleshaja Chikitsa, Kshara karma, Agnikarma and Shastrakarma<sup>3</sup>. Kshara<sup>4</sup> the alkaline group of medicinal substances, has been emphasized throughout the classical literature for Arshas, described as an Upayantra<sup>5</sup>, substitute for surgical instrument and can be used safely in patients who are afraid of surgery, old and weak also. When we observe the attitudes of today's patients, we understand that everyone wants quick relief but at the same time not interested to undergo surgery that gives severe post-operative pain, long hospitalization and so on. In such conditions simple procedures which are safe, gives complete relief with insignificant pain, without any complications and with less hospitalization is the need of the day.

Pratisaraneeya Kshara<sup>6</sup> satisfies all the above said demands of the current day patients and can be employed in the management of Arshas. It is effective, hence gaining importance and becoming popular nowadays. But still there are some problems faced during the preparation<sup>7</sup> of Pratisaraneeya Kshara and during the course of therapy like collection of drugs standardization of procedure and so on. Various research works have been undertaken in different institutions regarding this.

Acharya Sushruta has described many drugs in Ksharapakavidhi adhyaya which can be used for preparation of Pratisaraneeya kshara. The repeated advocacy of Kshara karma by almost all the ancient Acharya in the disease "Arsha" and the encouraging results of the previous studies on Pratisaraneeya Kshara, further

there is no reference available in either of the texts regarding the particular type of Pratisaraneeya Kshara to be used for the treatment of specific variety of Arshas have inspired to carry out this research work. Here, Apamarga<sup>8</sup> a seasonal plant, available during winter and rainy season and Palasha anon-seasonal big tree easily available in large quantity are selected.

This work includes preparation of Apamarga and Palasha Pratisaraneeya ksharas; evaluation and comparing the efficacy of Apamarga and Palasha Pratisaraneeya Kshara in the management of Arshas.

## MATERIAL AND METHODS

This clinical study was planned to evaluate the efficacy of Apamarga and Palasha Pratisaraneeya Kshara in Arshas, where patients suffering from first- and second-degree hemorrhoids were selected in random manner and divided into 2 groups in each 15 patients.

### Source of Data

30 Patients with signs and symptoms of Arshas were selected from O.P.D and I.P.D of K.V.G. Ayurveda Medical College and Hospital, Sullia -574327, DK, Karnataka, India. Patients were of different age groups of the gender belonging to different walks of life. They were divided into 2 groups. The criteria for the selection of the patient were as follows:

### Inclusion Criteria

- Patients between 20 years and 70 years of age.
- Presence of signs and symptoms of arshas.
- No discrimination of gender, chronicity or socio-economic status.

### Exclusion Criteria

- Patients below 20 and above 70 years of age.
- Patients with other serious systemic disorders.
- Contra-indications of kshara karma.
- Patients having any other lesions in the locality.

### Diagnostic Criteria

Diagnosis will be established by confirming the lakshanas of the Arshas, 1<sup>st</sup> and 2<sup>nd</sup> degree haemorrhoids after thorough clinical examination of the patient.

### Research Design

Randomized comparative clinical trial was adopted in the study. 30 Patients fulfilling the inclusion criteria will be divided into two groups, each group containing 15 patients only.

The study involves human subjects hence ethical clearance was obtained from the ethical committee of K.V.G. Ayurveda Medical College and Hospital, Sullia -574327, DK, Karnataka, India as per ICH-GCP Guidelines.

### Therapeutic intervention

**Group A:** Patients of this group were treated with Apamarga Pratisaraneeya Kshara

**Group B:** Patients of this group were treated with Palasha Pratisaraneeya Kshara.

### Observation and Recordings of Data

- First recording- Pre-treatment examination
- Second recording- after the treatment
- Follow up observation- On the fourteenth day

### Assessment criteria

#### Subjective parameters

- Mass per-rectum
- Pain

#### Objective parameters

- Size of the pile mass.
- Discharge

### Preparation of Apamarga Kshara

33 kg of fresh Apamarga (whole plant) was collected from in and around Ambate Adka, Sullia -574327, DK and Karnataka, India during the month of December and January. After drying 15 kg of dry Apamarga was obtained that was made into heap and burnt. After burning 1.25 kg of ash were obtained. This ash was measured in volumetric jar and to which 6 parts of water i.e. 15 litres of water was added and stirred well, allowed to settle overnight. Then it was filtered through double folded cloth for 21 times, residue was thrown out. Amber colored filtrate was obtained. This was subjected to Mandagni. When the content was reduced to half, about 1/3<sup>rd</sup> of Kshara Jala was taken out of the vessel. 1/10<sup>th</sup> of ash i.e. 125 gm of Shukti was heated to red hot and then mixed with 1/3<sup>rd</sup> Kshara Jala to dissolve it completely. Thus, dissolved Shukti was added to boiling Kshara Jala (Avapa stage) and continued to boil. Meanwhile 1/10<sup>th</sup> of Shukti i.e. 12.5 gm of Chitrakamoola Kalka was added to the boiling Kshara Jala (Prativapa stage) and allowed to boil for few more minutes, when the content attained consistency as described by Acharya Sushruta (not too liquid nor too solid), it was removed from fire allowed to cool down and transferred to glass container with lid and stored for use. pH value of the Kshara obtained was 13.5 (pH value of a strong alkali is 7 to 14). Same procedure was followed for the preparation of tikshna Palasha kshara. Palasha collected from Mysore, Karnataka, India but in less quantity.

### Equipments

Equipments required for the study are listed as follows:

- Dressing trolley
- Operation table
- Torch
- Normal proctoscope
- Slit proctoscope
- Stainless steel spoon or spatula (scratched handle)
- Gauze piece.
- Cotton balls
- Artery forceps - straight
- Artery forceps – curved
- Alley's forceps
- Sponge holding forceps
- Curved round body needle
- Needle holder
- Cotton thread
- Tissue cutting scissors
- Rubber catheter
- Disposable syringe - 10 ml.

### Procedure of Kshara Karma

Like any other operative procedure, all the two groups procedure has three stages - Pre-operative (Poorva Karma), Operative (Pradhana Karma), and Post-operative (Paschat Karma).

Procedures were common for both the groups.

#### Pre-operative Procedures

- Patient selected for the procedure were asked to remain nil orally after previous night dinner to the procedure.
- Part preparation was done
- Soap water enema was given in previous night and morning of the procedure.
- Pre medications and anesthesia were administered according to the need.

#### Operative Procedure

Patient was made to lie down in lithotomic position; anus and surrounding area was cleaned with antiseptic lotion. Draping was done. Local anaesthesia with 2% xylocaine was administered manual anal dilatation was done sufficient enough to admit four fingers. Lubricated normal proctoscope was introduced, position of pile mass was noted and skin around the pile mass was pulled

laterally with the Alley's forceps to get a better view of haemorrhoids. The healthy anal mucosa was covered with wet cotton balls to prevent spilling of Kshara on healthy mucosa. Then the pile mass was gently scraped with the rough surface of the spoon. Then Kshara was applied on the pile mass and the opening was closed for about 1 minute (Shata Matra kala) with the palm. Then the pile mass was cleaned with lemon juice. Observed that whether the pinkish pile mass was turned to blackish (Pakva Jambu Phala Varna). If not, Kshara was applied once again till the pile mass turned to blackish colour. Once again it was washed with lemon juice and sterile water wash was given. This procedure was repeated on all the pile masses. Thereafter the anal canal was packed with gauze. Dry dressing was done and the patient was shifted to ward.

#### Post-operative procedure

- Patient was kept nil by mouth for 4 hours after the Procedure.
- From next day onwards patient was advised to take Triphala kashaya sitz bath after passing motion for 10-15 min twice a daily and Jatyadi Taila was pushed per rectum after sitz bath.
- Diet restriction was advised to the patient. Analgesics administered according to the need

Table 1: Gradings of Mass per rectum

Symptom	Grades
Absent	0
Present	1

Table 2: Gradings of Pain

Symptom	Grade
No Pain	0
Pain tolerable without medicines	1
Pain relived after sitz bath	2
Pain relived with analgesics	3

Table 3: Gradings of size

Symptom	Grade
Absent (complete regression in size or no pile mass)	0
Mild (up to 0.5 cm)	1
Moderate (0.5-1 cm)	2
Severe (more than 1 cm)	3

Table 4: Gradings of discharge

Symptom	Grade
Present	1
Absent	0



Figure 1



Figure 2



Figure 3



Figure 4



Figure 5



Figure 6



Figure 7



Figure 8



Figure 9



Figure 10



Figure 11

#### Apamarga Pratisaraneeya Kshara



Figure 12: Before application of kshara

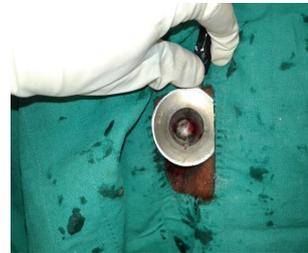


Figure 13: After application of kshara

#### Palasha Pratisaraneeya Kshara



Figure 14: Before application of kshara

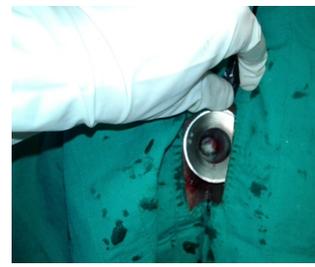


Figure 15: After application of kshara

#### RESULT

In this series of 30 patients of Arshas were treated in two groups each comprising of 15 patients. The patients of first group i.e. Group A were treated with Apamarga Pratisaraneeya Kshara application while the patients of the another; Group B were

treated with Palasha Pratisaraneeya Kshara application. In both the groups Kshara was applied on pile mass only once. The group wise results in detail are being described under the separate headings. The results obtained in both groups according to each parameter like Mass per rectum, pain, size of pile mass and discharge were as follows:

**Table 5: Effect of Apamarga Pratisaraneeya Kshara on Mass per rectum in Group A**

Mass per Rectum	Mean Rank	IQ Range		Mean Rank	IQ Range	Improvement (%) Wilcoxon	Significance (Friedman's test)
Before Treatment	2.7	0	BT-AT	4.5	0	53	< 0.05
After Treatment	1.9	1	AT-FU	3	1	70.2	< 0.05
Follow up	1.4	0	BT-FU	7	0	87	< 0.001

**Effect on mass per rectum**

Statistical analysis showed that before the treatment the mean rank of Mass per rectum was found to be 2.7 and after treatment it was reduced to 1.9 and after follow up the mean rank was 1.4

and using Friedman's test it was found to be highly significant (P < 0.001) results are graphically represented using Wilcoxon test the improvement after treatment is 53% is significant (P < 0.05) and after follow up the improvement is 87% is highly significant (P < 0.001).

**Table 6: Effect of Palasha Pratisaraneeya Kshara on Mass per rectum in Group B**

Mass per Rectum	Mean Rank	IQ Range		Mean Rank	IQ Range	Improvement (%) Wilcoxon	Significance (Friedman's test)
Before Treatment	2.6	0	BT-AT	4	0	47	< 0.05
After treatment	1.9	0	AT-FU	2.5	0	50.9	< 0.05
Follow up	1.5	1	BT-FU	6	1	73	< 0.05

**Effect on mass per rectum**

Statistical analysis showed that before the treatment the mean rank of Mass per rectum was found to be 2.6 and after treatment it was reduced to 1.9 and after follow up the mean rank was 1.5

and using Friedman's test it was found to be highly significant (P < 0.001) results are graphically represented using Wilcoxon test the improvement after treatment is 50.9% and it is significant and after follow up the improvement is 73% and it is significant.

**Table 7: Effect of Apamarga Pratisaraneeya Kshara on Pain in Group A**

Pain	Mean Rank	IQ Range		Mean Rank	IQ Range	Improvement (%) Wilcoxon	Significance (Friedman's test)
Before Treatment	3	2	BT-AT	8	2	66.5	< 0.001
After treatment	1.7	2	AT-FU	3.5	2	79.1	< 0.05
Follow up	1.3	0	BT-FU	8	0	93.5	< 0.001

**Effect on Pain**

Statistical analysis showed that before the treatment the mean rank of pain was found to be 3 and after treatment it was reduced to 1.7 and after follow up the mean rank was 1.3 and using

Friedman's test it was found to be highly significant (P < 0.001). Using Wilcoxon test the improvement after treatment is 66.5% is highly significant (P < 0.001) and after follow up the improvement is 93.5% is significant (P < 0.05).

**Table 8: Effect of Palasha Pratisaraneeya Kshara on Pain in Group B**

Pain	Mean Rank	IQ Range		Mean Rank	IQ Range	Improvement (%) Wilcoxon	Significance (Friedman's test)
Before Treatment	2.8	1	BT-AT	7	1	36.5	< 0.05
After treatment	2	1	AT-FU	6	1	62.9	< 0.05
Follow up	1.17	1	BT-FU	7.5	1	76.5	< 0.05

**Effect on Pain**

Statistical analysis showed that before the treatment the mean rank of pain was found to be 2.8 and after treatment it was reduced to 2 and after follow up the mean rank was 1.17 and using

Friedman's test it was found to be highly significant (P < 0.001). Using Wilcoxon test the improvement after treatment is 62.9 % is significant (P < 0.05) and after follow up the improvement is 76.5 % is highly significant (P < 0.001).

**Table 9: Effect of Apamarga Pratisaraneeya Kshara on Size in Group A**

Size	Mean Rank	IQ Range		Mean Rank	IQ Range	Improvement (%) Wilcoxon	Significance (Friedman's test)
Before Treatment	3	1	BT-AT	8	1	68.9	< 0.001
After treatment	1.73	1	AT-FU	4	1	78.3	< 0.05
Follow up	1.27	0	BT-FU	8	0	93.2	< 0.001

**Effect on Size**

Statistical analysis showed that before the treatment the mean rank of size was found to be 3 and after treatment it was reduced to 1.73 and after follow up the mean rank was 1.27 and using

Friedman's test it was found to be highly significant (P < 0.001). Using Wilcoxon test the improvement after treatment is 78.3 % is significant (P < 0.05) and after follow up the improvement is 93.2 % is highly significant (P < 0.001).

**Table 10: Effect of Palasha Pratisaraneeya Kshara on Size in Group B**

Size	Mean Rank	IQ Range		Mean Rank	IQ Range	Improvement (%) Wilcoxon		Significance (Friedman's test)
Before Treatment	2.97	1	BT-AT	7.5	1	56.3	< 0.05	< 0.001
After treatment	1.73	2	AT-FU	4.5	1	43	< 0.05	
Follow up	1.3	1	BT-FU	8	0	75	< 0.001	

**Effect on Size**

Statistical analysis showed that before the treatment the mean rank of size was found to be 2.97 and after treatment it was reduced to 1.73 and after follow up the mean rank was 1.3 and

using Friedman's test it was found to be highly significant (P < 0.001). Using Wilcoxon test the improvement after treatment is 43% is significant (P < 0.05) and after follow up the improvement is 75 % is highly significant (P < 0.001).

**Table 11: Effect of Apamarga Pratisaraneeya Kshara on Discharge in Group A**

Discharge	Mean Rank	IQ Range		Mean Rank	IQ Range	Improvement (%) Wilcoxon		Significance (Friedman's test)
Before Treatment	2.47	1	BT-AT	4	1	88.6	< 0.05	< 0.05
After treatment	1.77	0	AT-FU	0	0	-	> 0.05	
Follow up	1.77	0	BT-FU	4	0	88.6	< 0.05	

**Effect on Discharge**

Statistical analysis showed that before the treatment the mean rank of discharge was found to be 2.47 and after treatment it was

reduced to 1.77 and after follow up the mean rank was 1.77 and using Friedman's test it was found to be significant (P < 0.05). Using Wilcoxon test the improvement after treatment and after follow up is 88.6 % is significant (P < 0.05).

**Table 12: Effect of Palasha Pratisaraneeya Kshara on Discharge in Group B**

Discharge	Mean Rank	IQ Range		Mean Rank	IQ Range	Improvement (%) Wilcoxon		Significance (Friedman's test)
Before Treatment	2.37	1	BT-AT	2.5	1	40.2	< 0.05	< 0.05
After treatment	1.97	1	AT-FU	2	1	50	> 0.05	
Follow up	1.67	0	BT-FU	4	0	70.1	< 0.05	

**Effect on Discharge**

Statistical analysis showed that before the treatment the mean rank of discharge was found to be 2.37 and after treatment it was reduced to 1.97 and after follow up the mean rank was 1.67 and

using Friedman's test it was found to be significant (P < 0.05). Using Wilcoxon test the improvement after treatment is 50 % is not significant (P > 0.05) and after follow up the improvement is 70.1 % is significant (p < 0.05).

**Table 13: Effect of Apamarga Pratisaraneeya Kshara in Group A**

Group A	Mean Rank	IQ Range		Mean Rank	IQ Range	Improvement (%) Wilcoxon		Significance (Friedman's test)
Before Treatment	3	2	BT-AT	8	2	63.4	< 0.01	< 0.001
After treatment	1.8	3	AT-FU	5	3	73.9	< 0.01	
Follow up	1.2	0	BT-FU	8	0	91.6	< 0.01	

**Table 14: Effect of Palasha Pratisaraneeya Kshara in Group B**

Group B	Mean Rank	IQ Range		Mean Rank	IQ Range	Improvement (%) Wilcoxon		Significance (Friedman's test)
Before Treatment	2.93	3	BT-AT	8.43	3	46.03	< 0.01	< 0.001
After treatment	1.93	4	AT-FU	6	4	53.8	< 0.01	
Follow up	1.13	4	BT-FU	8	4	74.6	< 0.01	

**Overall Effect**

Statistical analysis showed that in Group B before the treatment the mean rank was found to be 2.93 and after treatment it was reduced to 1.93 and after follow up the mean rank was 1.13 and

using Friedman's test it was found to be highly significant (P < 0.001). Using Wilcoxon test the improvement after treatment is 46.03 % is highly significant (P < 0.01) and after follow up the improvement is 91.6 % is highly significant (P < 0.001).

**Table 15: Comparison of overall results in Group A and Group B**

	Group	N	Mean Rank	Mann Whitney U test (P value)
Before Treatment	Group A	15	14.20	> 0.05
	Group B	15	16.80	
	Total	30		
After Treatment	Group A	15	12.97	> 0.05
	Group B	15	18.03	
	Total	30		
Follow up	Group A	15	12.87	> 0.05
	Group B	15	18.03	
	Total	30		

On analyzing before and after treatment effects Using Mann Whitney test, the mean rank after treatment of Group A is 12.97 and that of Group B is 18.03 which is non-significant ( $P > 0.05$ ). On comparing the mean rank after follow up the Group A showed 12.87 and Group B showed 18.03 which is even non-significant ( $P > 0.05$ ). So, considering both it can be analyzed that there was

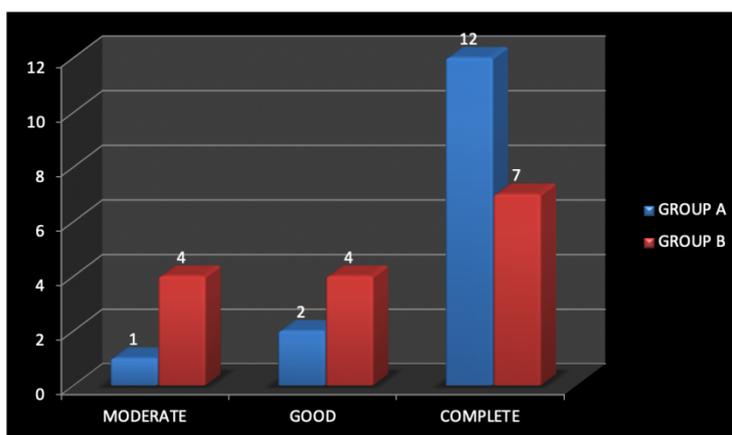
no significant difference in treatment observed between the two groups. But when we compare the individual criteria's percentage and the relief obtained, Group A stands better than Group B i.e. Apamarga Pratisaraneeya Kshara provides better results in mass per rectum, pain, size of pile mass.

**Table 16: Assessment of total effect between Group A and Group B**

Improvement	Group		Total
	Group A	Group B	
Moderate	1	4	5
	6.7 %	26.7 %	16.7 %
Good	2	4	6
	13.3 %	26.7 %	20.0 %
Complete	12	7	19
	80.0 %	46.7 %	63.3 %
Total	15	15	30
	100.0 %	100.0 %	100.0 %

To assess the association between Improvement status and the Groups, chi square test was used and it found to be non-significant ( $P > 0.05$ ). Also, we can observe that with Apamarga Pratisaraneeya Kshara complete improvement is seen in 80 % of patients, whereas complete improvement is seen only in 47.6 % of patients with Palasha Pratisaraneeya Kshara. 6.7 % had moderate improvement with Apamarga Pratisaraneeya Kshara

and 26.7 % had moderate improvement with Palasha Pratisaraneeya Kshara. Though statistically there is no significant difference between the Apamarga and Palasha Pratisaraneeya Ksharas, Usage of Apamarga Pratisaraneeya Kshara holds good in managing the Arshas. The details are shown with statistical data in Table 16 and graphically represented.



**Figure 16: Comparison of Improvement Group A and B**

**DISCUSSION**

Post-operative condition of Effects of the Therapies assessment was done on the criteria of Mass per rectum, pain, size of pile mass and discharge.

Statistical analysis showed that in Apamarga Pratisaraneeya Kshara before the treatment the mean rank of Mass per rectum was found to be 2.7 and after treatment it was reduced to 1.9 and

after follow up the mean rank was 1.4, found to be highly significant ( $P < 0.001$ ) whereas in Palasha Pratisaraneeya Kshara statistical analysis showed that before the treatment the mean rank of Mass per rectum was found to be 2.6 and after treatment it was reduced to 1.9 and after follow up the mean rank was 1.5, found to be highly significant ( $P < 0.001$ ).

Statistical analysis showed that in Apamarga Pratisaraneeya Kshara, before the treatment the mean rank of pain was found to

be 3 and after treatment it was reduced to 1.7 and after follow up the mean rank was 1.3, found to be highly significant ( $P < 0.001$ ) whereas in Palasha Pratisaraneeya Kshara statistical analysis showed that before the treatment the mean rank of pain was found to be 2.8 and after treatment it was reduced to 2 and after follow up the mean rank was 1.17, found to be highly significant ( $P < 0.001$ )

Statistical analysis showed that in Apamarga Pratisaraneeya Kshara, before the treatment the mean rank of size was found to be 3 and after treatment it was reduced to 1.73 and after follow up the mean rank was 1.27, found to be highly significant ( $P < 0.001$ ). whereas in Palasha Pratisaraneeya kshara statistical analysis showed that before the treatment the mean rank of pain was found to be 2.97 and after treatment it was reduced to 1.73 and after follow up the mean rank was 1.3, found to be highly significant ( $P < 0.001$ ).

Statistical analysis showed that in Apamarga Pratisaraneeya Kshara, before the treatment the mean rank of discharge was found to be 2.47 and after treatment it was reduced to 1.77 and after follow up the mean rank was 1.77, found to be significant ( $P < 0.05$ ), whereas in Palasha Pratisaraneeya Kshara statistical analysis showed that before the treatment the mean rank of discharge was found to be 2.37 and after treatment it was reduced to 1.97 and after follow up the mean rank was 1.67, found to be significant ( $P < 0.05$ ).

Statistical analysis showed that in Group A i.e. Apamarga Pratisaraneeya Kshara, before the treatment the mean rank was found to be 3 and after treatment it was reduced to 1.8 and after follow up the mean rank was 1.2, found to be highly significant ( $P < 0.001$ ). whereas in Palasha Pratisaraneeya kshara statistical analysis showed that in Group B, before the treatment the mean rank was found to be 2.93 and after treatment it was reduced to 1.93 and after follow up the mean rank was 1.13, found to be highly significant ( $P < 0.001$ ).

The mean rank after treatment by Apamarga Pratisaraneeya kshara is 12.97 and that of Palasha Pratisaraneeya Kshara is 18.03 which is non-significant ( $P > 0.05$ ). On comparing the mean rank after followup, in the Group A was 12.87 and Group B was 18.03 which is non-significant ( $P > 0.05$ ). So considering both it can be analyzed that there was no significant difference in treatment observed between the two groups. But when we compare the individual criteria's percentage and the relief obtained, Group A provided better than Group B i.e. Apamarga Pratisaraneeya kshara gave better results in mass per rectum, pain and size of pile mass.

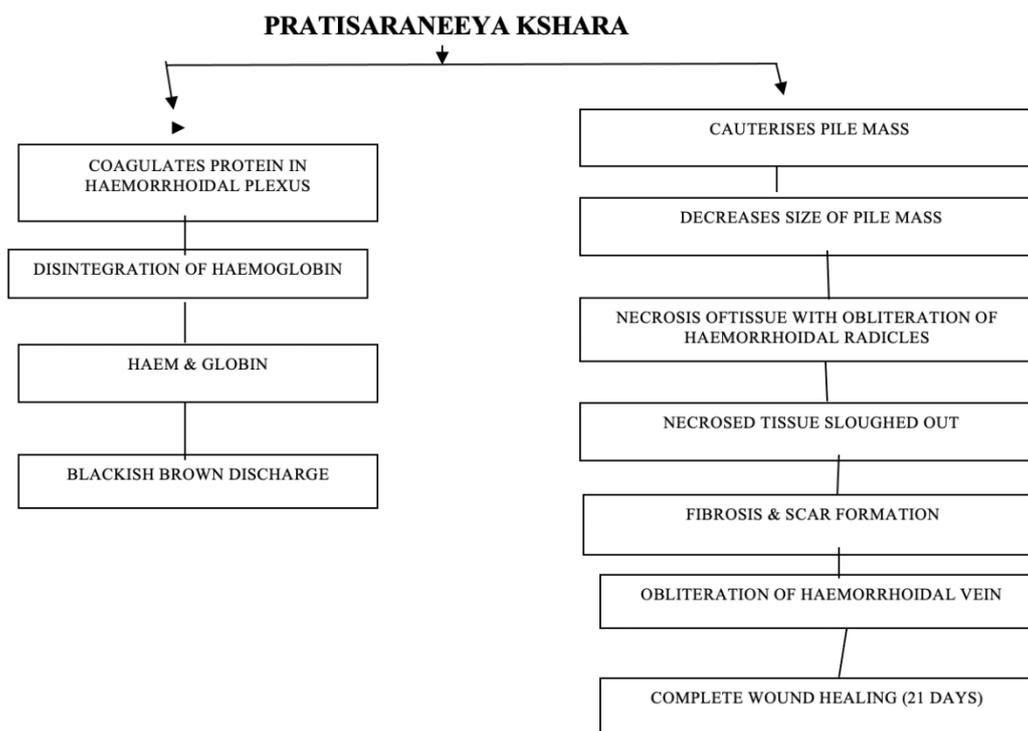
Apamarga Pratisaraneeya Kshara showed complete improvement in 80 % of patients, whereas complete improvement was got only in 47.6 % of patients with Palasha Pratisaraneeya Kshara. 6.7 % had moderate improvement with Apamarga Pratisaraneeya kshara and 26.7 % had moderate improvement with Palasha Pratisaraneeya Kshara. Statistically there was no significant difference between the Apamarga and Palasha Pratisaraneeya Ksharas.

**Probable Mode of Action**

Pratisaraneeya kshara acts on haemorrhoids in two ways –

1. It cauterizes the pile mass directly because of its Ksharana Guna (corrosive nature)
2. It coagulates protein in hemorrhoidal plexus.

The disintegration of haemoglobin into haem and globin occurs as a result of coagulation of protein. These actions result in reducing the size of the pile mass. Necrosis of the tissue in the hemorrhoidal vein follows and the necrosed tissue sloughs out as blackish brown discharge for a period of 3 to 7 days. The colour of the discharge is owing to the presence of haem in the slough. Fibrosis of the tissue along with scar formation is seen. As the hemorrhoidal vein obliterates permanently, there are no chances of recurrence of haemorrhoids.



## Advantages

Kshara therapy techniques have advantages over other treatment methods of haemorrhoids like:

- Post-operative pain is mild in intensity.
- No bleeding
- Minimum hospitalization
- No scope for recurrence
- No stricture formation (if correct procedure is followed).
- In Kshara therapy, as the coagulation of hemorrhoidal veins occurs, no chance of bleeding.
- Treating all the pile mass in one sitting with the help of local anesthesia, thus reducing the total duration of treatment.

## CONCLUSION

The disease described as Arshas in Ayurvedic literature can be regarded as Haemorrhoids described in modern medical science. A clear-cut description of anatomy and physiology of anorectal region is found in Ayurvedic literatures. Acharya Sushruta's clinical classification of the disease is helpful in the treatment. Apamarga Kshara prepared for the present study had pH of 13.5 and Palasha Kshara had pH of 13.2. Both Kshara were applied only once to all the pile mass at a time as per Pratisarana method. Apamarga Pratisaraneeya Kshara provided highly significant relief in Mass per rectum by 53 %, in pain by 66.5 %, in size of pile mass by 68.9 % and in discharge by 88.6 % within 7 days of application of Kshara. Complete relief was noticed in 80 % of the patients. Palasha Pratisaraneeya Kshara provided significant relief in mass per rectum by 47 %, in pain by 36.5 %, in size of pile mass by 56.3 % and in discharge by 40.2 % within 7 days of the application of the Kshara. Complete relief was noticed in 46.7 % of the patients. Though statistically there is no significant difference between the Apamarga and Palasha Pratisaraneeya ksharas, Apamarga Pratisaraneeya kshara showed an upper hand in managing the Arshas. Kshara Karma has advantages like minimum hospitalization, less pain, minimum bleeding, no stricture formation (if correctly applied) and no recurrence, cost

effective and easy management with local anesthetic agents which enables treating all the pile masses in one sitting.

So, these concepts of Ayurveda should be widely spread, popularized and implemented in the management of such troublesome diseases which is the anticipation of sufferers.

## REFERENCES

1. Acharya Madhavakara. Arsho Nidana. In: Singhal, G.D, Tripathi, S.N (eds.) Madhava Nidana (Rogavinischaya). Delhi: Chaukhambha Sanskrit Pratishthan; 2010. p. 45.
2. Sushruta Acharya, Sushruta Samhita. (Reprint, Avaraneeya adhyaya/4, Ed.). Varanasi: Chaukhambha Surbharati Prakashan; 2014. p. 144.
3. Sushruta Acharya, Sushruta Samhita. (Reprint, Ritucharya adhyaya/3, Ed.). Varanasi: Chaukhambha Surbharati Prakashan; 2014. p. 43.
4. Sushruta Acharya, Sushruta Samhita. (Reprint, Ksharapakavidhi adhyaya/3-5, Ed.). Varanasi: Chaukhambha Surbharati Prakashan; 2014. p. 45.
5. Sushruta Acharya, Sushruta Samhita. (Reprint, Ksharapakavidhi adhyaya/3, Ed.). Varanasi: Chaukhambha Surbharati Prakashan; 2014. p. 45.
6. Sushruta Acharya, Sushruta Samhita. (Reprint, Ksharapakavidhi adhyaya/6-8, Ed.). Varanasi: Chaukhambha Surbharati Prakashan; 2014. p. 46
7. Sushruta Acharya, Sushruta Samhita. (Reprint, Ksharapakavidhi adhyaya/11, Ed.). Varanasi: Chaukhambha Surbharati Prakashan; 2014. p. 46.
8. Sushruta Acharya, Sushruta Samhita. (Reprint, Ksharapakavidhi adhyaya/11, Ed.). Varanasi: Chaukhambha Surbharati Prakashan; 2014. p. 46.

## Cite this article as:

Aiyanna P. P. et al. A Comparative Clinical Study on the efficacy of Apamarga and Palasha Pratisaraneeya Kshara in Arshas. Int. J. Res. Ayurveda Pharm. 2020;11(6):47-55 <http://dx.doi.org/10.7897/2277-4343.1106183>

Source of support: Nil, Conflict of interest: None Declared

Disclaimer: IJRAP is solely owned by Moksha Publishing House - A non-profit publishing house, dedicated to publishing quality research, while every effort has been taken to verify the accuracy of the content published in our Journal. IJRAP cannot accept any responsibility or liability for the site content and articles published. The views expressed in articles by our contributing authors are not necessarily those of IJRAP editor or editorial board members.