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**Sreerag M V**

Post graduate Scholar, Department  
of PG studies in Shalya Tantra,  
Sri Dharmasthala  
Manjunatheshwara College of  
Ayurveda and Hospital, Hassan,  
Karnataka-573201, India

**Prasanna N Rao**

Professor and Principal,  
Department of PG studies in  
Shalya Tantra, Sri Dharmasthala  
Manjunatheshwara College of  
Ayurveda and Hospital, Hassan,  
Karnataka-573201, India

**P Hemantha Kumar**

Professor and HOD, Department  
of PG studies in Shalya Tantra,  
National Institute of Ayurveda,  
Jaipur, Rajasthan-302002, India

**Gopikrishna B J**

Associate Professor and HOD,  
Department of PG studies in  
Shalya Tantra, Sri Dharmasthala  
Manjunatheshwara College of  
Ayurveda and Hospital, Hassan,  
Karnataka-573201, India

**Avnish Pathak**

Associate Professor, Department of  
PG studies in Shalya Tantra, Sri  
Dharmasthala  
Manjunatheshwara College of  
Ayurveda and Hospital, Hassan,  
Karnataka-573201, India

**Correspondence:**

**Sreerag M.V**

Post graduate Scholar, Department  
of PG studies in Shalya Tantra, Sri  
Dharmasthala Manjunatheshwara  
College of Ayurveda and Hospital,  
Hassan, Karnataka-573201, India  
Email: [mvsreerag@gmail.com](mailto:mvsreerag@gmail.com)

## Effect of Saptacchada Teekshna Pratisaraneeya Kshara in the management of Ardra Arshas

**Sreerag M V, Prasanna N Rao, P Hemantha Kumar, Gopikrishna B J, Avnish Pathak**

**ABSTRACT**

Arshas are one of the commonest ano-rectal disease. Susruta has mentioned Kshara Karma prior to Agni & Sastra Karma as treatment modalities for Arshas. Various research studies have been conducted on Apamarga, Chitraka, Aragwadha, Palasha, Arka and Kutaja Kshara on the same. So there is a need to evaluate the efficacy of Kshara prepared with other drugs mentioned by Susruta. So the present study was proposed to evaluate the effect of Saptacchada Teekshna Pratisaraneeya Kshara in the management of Ardra Arshas. The Kshara was applied to selected 30 patients of Ardra Arshas after proper evaluation. The signs and symptoms were assessed before and after the treatment. The symptom of bleeding per rectum was completely relieved within 2 weeks after treatment. Overall all signs and symptoms were completely relieved in all patients with in a period of 30 days after treatment. No recurrence was noted up to 3 months follow up.

**Keywords:** Arshas, piles, Kshara, Saptacchada, Alstonia scholaris, Haemorrhoids

**1. Introduction**

Maintenance of Health in terms of Preservation, Promotion as well as Longevity always has been a challenge in the history of mankind. Medical research is the search for cures to illness and disease. Without scientific knowledge, it is hard to have a public health policy that makes sense. The research for promotion of radiant health and treatment for diseases began with the evolution of human life itself. The first written accounts, the Vedas contain the seeds of this thought and in fact have laid the foundation stone for the medical wisdom. Ayurveda gives equal importance to mitigation of diseases as well as preservation of good health. Arshas is certainly one of the commonest ailments among ano-rectal disorders that afflict mankind. It affects the both sexes. As Arshas pertains to a disease occurring in ano-rectal region, it gives torture to the patient's daily routine after creating hindrance on ano-rectal passage. As it is difficult to treat completely it has been placed in the group of Ashta Mahagada <sup>[1]</sup>. The incidence of piles apparently increases with age and it seems likely that at least 50% of people over the age of 50 years have some symptoms related to piles <sup>[2]</sup>. The irregular food habits and modern life styles of man also added to the increase in the rate of incidence of Arshas. Attitudes of most patients in this modern era are extremely different. They want quick relief instead of undergoing surgical techniques like haemorrhoidectomy as it gives severe post-operative pain. As it has more incidence rate, there is necessity to ascertain a technique which is more comfortable to the patients. In Ayurvedic science, Kshara Karma procedure has achieved this goal.

Shalya Tantra is the integral part of Ayurvedic system contains detail description of Shastra Karma along with certain para surgical procedures such as Kshara Karma, Agni Karma and Jalaukavacharana. Among these para surgical measures, Kshara Karma is having supreme place due to its enormous properties in curing disease like Arshas and thus it can even replace Shastra Karma. Kshara Karma procedure that gives better relief and the pain is insignificant. Acharyas have mentioned the description of Kshara, its preparations and indications in different contexts. Acharya Susruta has mentioned about 23 drugs for the preparation of Kshara <sup>[3]</sup>. Even though Standard Apamarga Kshara has proved better result in Arshas management but its less availability throughout year is still a matter of concern in Kshara preparation. Saptacchada is one among 23 drugs, which is abundantly available and easy for collection. Therefore Saptacchada plant was selected to make the Teekshna Pratisaraneeya Kshara for the present study. Hence this study was implemented with aim to appraise the Effect of Saptacchada Teekshna Pratisaraneeya Kshara in the management of Ardra Arshas.

## 2. Materials and methods

### 2.1 Source of data

30 patients were selected from the OPD and IPD of department of Shalya tantra, S.D.M College of Ayurveda & Hospital, Hassan.

### 2.2 Type of Study

An observational study was done on selected 30 patients of Ardra Arshas and treated with Saptacchada Teekshna Pratisaraneeya Kshara.

### 2.3 Diagnostic criteria

Diagnosis was made on the basis of history of patient, signs and symptoms. Complete history and clinical evaluation of all patients were recorded in a research Proforma, including both Ayurvedic and modern methods of examination.

#### 2.3.1 Signs and symptoms of Ardra Arshas

As Ardra Arshas is due to Rakta and Pitta Dosha, it has sign and symptoms of Rakta and Pitta Arshas like Vata Ankuravat, Gunja Phala Varna, Rakta Srava, Neelagra, Tanu, Visarpa, Peetavabhasa, Yakruith Prakashini, Yava Madhya, Praklinna and Jalauka Vaktra Sadrusha [4].

#### 2.3.2 History of the Patient

Complete history of the patients with presenting complaints like mass per rectum, discharge, pain, onset, duration and bowel habit were noted. History of previous treatment particularly previous surgery and also family history, occupation, personal history and diet habits were taken into consideration to assess the incidence and recurrence of the disease and its relation to the occupation, habit etc.

#### 2.3.3 Systemic Examination

Each patient was examined systematically under different systems like gastro-intestinal, cardiovascular, respiratory, central nervous and genito-urinary system. If any system was found diseased, then the specific investigations were used to confirm, so as to assess whether it falls in inclusion criteria or exclusion criteria.

#### 2.3.4 Local examination

It was done under following headings for the present study.

##### i. Inspection

First patient was made to lie down in lithotomy position. Then the mass per rectum and its size were examined to categorize them on the basis degrees of haemorrhoids. Also other pathologies related with anal canal like Parikartika (fissure in ano), Bhagandara (fistula in ano) and Gudabhramsha (Rectal Prolapse) were looked into.

##### ii. Digital rectal examination

The aim of digital examination is to know the anal sphincter tonicity whether it is normal or relaxed. Any fissure, thrombotic pile mass, malignancy, induration, internal openings of fistula with their positions and prostate in males were also noted by digital rectal examination.

##### iii. Proctoscopy examination

For the assessment of presence or absence of internal pile masses, evaluation of the position, colour and size of internal pile masses. Also used for the assessment of other lesions in rectum and anal canal like growth, ulcer and hypertrophied

anal papillae.

### 2.3.5 Laboratory Investigations

Routine blood for total count, differential count, erythrocyte sedimentation rate, hemoglobin percentage, random blood sugar, bleeding time, clotting time, blood urea, Urine routine was carried out to know any infection and systemic diseases.

### 2.4 Inclusion Criteria

- Arshas which are of Mrudu (soft), Prasruta (Extensive), Avagada (deeply situated), Uchrita (projected).
- First, second and third degree internal pile masses.
- Patients above the age of 12 years.

### 2.5 Exclusion criteria

- Fourth degree internal pile mass
- External pile mass.
- Patients with carcinoma of rectum.
- HIV and HBsAg positive patients.
- Patients with other systemic illness like Uncontrolled diabetes mellitus, Uncontrolled hypertension, Crohn's disease, Ulcerative colitis and Tuberculosis.

### 2.6 Drug material used

Saptacchada Teekshna Pratisaraneeya Kshara.

#### 2.6.1 Ingredients of Saptacchada Teekshna Pratisaraneeya Kshara

1. Saptacchada (*Alstonia scholaris*) – 10 kg
2. Shukti (Oyster shell) - 100 gm
3. Chitrakamula kalka (Root paste of *Plumbago zeylanica*) - 10 gm
4. Water 6 parts (in volume) of Saptacchada Bhasma

#### 2.6.2 Preparation of Saptacchada Kshara

Panchangas of Saptacchada (10 kg) was collected and it was dried. Then the dried plant was burnt into ashes and it was allowed to cool by itself. The whole collected ash was (1 kg) mixed with six parts (in volume) of water and stirred well then allowed to settle overnight. Then it was filtered through double folded cloth for 21 times and the residue was thrown out. Gomutra Varna filtrate thus obtained was heated on slow fire. When the content was reduced to half, about 1/3 of Kshara Jala was taken out of the vessel. 100 gm of Shukti was heated upto red hot and then mixed with 1/3 Kshara Jala to dissolve it completely. Thus dissolved Shukti was added to boiling Kshara Jala (Avapa stage) and continued to boil till the content attained consistency as described by Sushruta (not too liquid or too solid). 10 gm of Chitrakamula Kalka was then finally added to this kshara. Then it was removed from fire and transferred into separate container with lid and stored for use.

### 2.7 Procedure of Kshara Karma

Any procedures connected to surgery were classified under main three stages. They are pre-operative procedures (Purva Karma), operative procedure (Pradhana Karma) and post-operative procedures (Paschat Karma).

#### 2.7.1 Pre-operative procedures

- Patients were not allowed to take orally at least 6 hours prior to the procedure.
- Part preparation was done.

- Enema was given before 4 hours of operative procedure.
- Informed surgical consent was taken.
- Pre medications were administered according to the need.

### 2.7.2 Operative Procedure

Patient was made to lie down in lithotomy position after suitable anesthesia. Anus and perianal region was cleaned with antiseptic lotion & draping was done. Maximal anal dilatation was done sufficient enough to admit four fingers. Lubricated normal proctoscope was introduced into the anus. Proctoscope was removed after the assessment of position of pile mass. Then slit proctoscope was introduced and skin around pile mass was pulled laterally with Allis forceps to get a better view of pile mass.

- The healthy anal mucosa was covered with cotton swabs to prevent the spilling of Teekshna Pratisaraneeya Kshara on it. Then scraping (Lekhana) was done over the pile mass with the rough surface of spatula. Then the Saptacchada Teekshna Pratisaraneeya Kshara was applied over pile mass. The opening of proctoscope was closed with palm of hand for a period of 100 Matra Kala (ie 35 sec to 1 min). Then the pile mass was cleaned with lemon juice (Nimbu Swarasa). The colour of pile mass was turned to reddish black (Pakva Jambu Phala Varna).
- If the Pakva Jambu Phala Varna was not obtained even after application, Kshara was applied once again till the pile mass turned to reddish black 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 piece soaked in Yastimadhu Taila to prevent pain, burning sensation and local oedema. Dry dressing was done and the patient was shifted to post-operative ward.

### 2.7.3 Post-operative procedure

- Patient was kept nil by mouth for 4-6 hours after the Procedure.
- Packing was removed after 6 hours and 15ml of Yastimadhu Taila was administered per rectal.
- From next day onwards patient was advised to take Panchavalkala Kwatha Sitz bath after defecation for 10-15 mins thrice a daily.
- 15 ml of Yastimadhu Taila was pushed per rectal after Sitz bath.
- Abhayaristam was given 30 ml after breakfast and dinner.
- 1 t.s.f. of Triphala Churna was given at night with luke warm water.
- Triphala guggulu (2 BID) and Gandhaka Rasayana (2 BID) was given.
- Analgesics administered according to the need.
- Diet restriction was advised to the patient.

### 2.8 Follow up study

Follow up of patients was done on daily for 1<sup>st</sup> week to assess the post-operative recovery and on 15<sup>th</sup> day, 21<sup>st</sup> & 30<sup>th</sup> day to assess the effect of treatment. Thereafter evaluation was done on 3<sup>rd</sup> month for the recurrence rate.

### 2.9 Assessment Criteria

Assessment was done before and after the treatment based on the subjective and objective parameters, which were formulated for Arshas.

#### 2.9.1 Subjective Parameters

- Pain associated with defecation (Table-1)
- Bleeding per rectum (Table-2)
- Constipation (Table-3)

**Table 1:** Assessment criteria for Pain associated with defecation

Symptoms	Grading
No pain	0
Pain during defecation	1
Pain during and after defecation which reduces within 30 minutes	2
Pain during rest also	3

**Table 2:** Assessment criteria for Bleeding per rectum

Symptoms	Grading
No bleeding	0
Bleeding only during defecation	1
Bleeding during and after defecation which stops within 30 minutes	2
Bleeding irrespective to defecation	3

**Table 3:** Assessment criteria for Constipation

Symptoms	Grading
Sensation of complete bowel evacuation	0
Sensation of incomplete bowel evacuation	1
Difficulty in defecation	2
Infrequent bowel evacuation	3

#### 2.9.2 Objective Parameters

- Size of pile mass (Table-4)
- Colour of pile mass (Table-5)
- Condition of anal sphincter tonicity (Table-6)

**Table 4:** Assessment criteria for Size of pile mass

Signs	Grading
Complete reduction in size of pile mass	0
Moderate reduction in size of pile mass	1
Slight reduction in size of pile mass	2
No change in size of the pile mass	3

**Table 5:** Assessment Criteria for Colour of pile mass

Signs	Grading
Bluish red colour	0
Pinkish colour	1
Slightly blackish colour	2
Reddish black colour (Pakva Jambu Phala Varna)	3

**Table 6:** Assessment Criteria for tonicity of anal sphincter

Signs	Grading
Normal tonicity	0
Mild hypertonicity	1
Moderate hypertonicity	2
Severe hypertonicity	3

**Table 7:** Showing prevalence in each criteria of observations

Criteria		No of Patients	Percentage
Age groups	31-40	12	40
Gender	Female	19	63.3
Religion	Hindus	29	96.7
Marital status	Married	25	83.3
Occupation	Moderate	18	60
Socio-Economic status	Middle	13	43.3
Chronicity	Less than 6 months	17	56.7
Diet	Mixed	27	90
Nature of bowel habits	Constipated	27	90
Position of pile masses	3,7 & 11 O' Clock	14	46.7

### 3.2 Effect of therapy

Friedman's test was applied to assess the effect of therapy. Post hoc analysis with Wilcoxon signed-rank tests was

conducted with a Bonferroni correction applied resulting in a significance level set at  $p < 0.01$ .

**Table 8:** Effect of each parameter according to Friedman test

Parameter	N	X <sup>2</sup> (4)	P value	Remark
Pain associated with defecation	30	94.360	0.000	S
Bleeding per rectum	30	116	0.000	S
Constipation	30	96.703	0.000	S
Size of pile mass	30	105.227	0.000	S
Colour of pile mass	30	103.899	0.000	S
Tonicity of anal sphincter	30	80.626	0.000	S

#### 3.2.1 Effect of therapy on Pain associated with defecation

There was a statistically significant difference in pain associated with defecation  $\chi^2(4) = 94.360$ ,  $p = 0.000$  (Table 8). The reduction in pain in 1<sup>st</sup> week was significant ( $Z = -4.802$ ,  $p = 0.000$ ). There were no statistically significant reduction in pain during 2<sup>nd</sup> week of treatment ( $Z = -1.213$ ,  $p = 0.225$ ). There were no statistically significant reduction in pain during 3<sup>rd</sup> week of treatment ( $Z = -2.449$ ,  $p = 0.014$ ). There were no statistically significant reduction in pain during 4<sup>th</sup> week of treatment ( $Z = 0.000$ ,  $p = 1.000$ ) (Table 9).

#### 3.2.2 Effect of therapy on bleeding per rectum

There was a statistically significant difference in bleeding per rectum  $\chi^2(4) = 116$ ,  $p = 0.000$  (Table 8). The reduction in bleeding per rectum in 1<sup>st</sup> week was significant ( $Z = -5.209$ ,  $p = 0.000$ ). There were no statistically significant reduction in bleeding per rectum during 2<sup>nd</sup> week of treatment ( $Z = -1.000$ ,  $p = 0.317$ ). There were no statistically significant reduction in bleeding per rectum during 3<sup>rd</sup> week of treatment ( $Z = 0.000$ ,  $p = 1.000$ ). There were no statistically significant reduction in bleeding per rectum during 3<sup>rd</sup> week of treatment ( $Z = 0.000$ ,  $p = 1.000$ ) (Table - 10).

**Table 9:** Pain associated with defecation according to wilcoxon signed rank test

Parameter	Ranks	N	Mean Rank	Sum of Ranks	Z value	P value	Remark
Pain BT - AT 7	NR	28	14.5	406	-4.802	0.000	S
	PR	0	0	0			
	Ties	2					
Pain AT 7 – AT 15	NR	11	9.0	99	-1.213	0.225	NS
	PR	6	9	54			
	Ties	13					
Pain AT 15 – AT 21	NR	6	3.5	21	-2.449	0.014	NS
	PR	0	0	0			
	Ties	24					
Pain AT 21– AT 30	NR	0	0	0	0.000	1.000	NS
	PR	0	0	0			
	Ties	30					

**Table 10:** Bleeding per rectum according to Wilcoxon signed rank test

Parameter	Ranks	N	Mean Rank	Sum of Ranks	Z value	P value	Remark
Bleeding BT - AT 7	NR	28	14.5	406	-5.209	0.000	S
	PR	0	0	0			
	Ties	2					
Bleeding AT 7 – AT 15	NR	0	1	1	-1.000	0.317	NS
	PR	0	0	0			
	Ties	30					
Bleeding AT 15 – AT 21	NR	0	0	0	0.000	1.000	NS
	PR	0	0	0			
	Ties	30					
Bleeding AT 21– AT 30	NR	0	0	0	0.000	1.000	NS
	PR	0	0	0			
	Ties	30					

### 3.2.3 Effect of therapy on constipation

There was a statistically significant difference in constipation  $\chi^2(4) = 96.703$ ,  $p = 0.000$  (Table 8). The reduction in constipation in 1<sup>st</sup> week was significant ( $Z = -4.971$ ,  $p = 0.000$ ). There were no statistically significant reduction in constipation during 2<sup>nd</sup> week of treatment ( $Z = -1.897$ ,  $p = 0.058$ ). There

were no statistically significant reduction in constipation during 3<sup>rd</sup> week of treatment ( $Z = -3.000$ ,  $p = 0.003$ ). There were no statistically significant reduction in constipation during 3<sup>rd</sup> week of treatment ( $Z = 0.000$ ,  $p = 1.000$ ) (Table 11).

**Table 11:** Effect of therapy on constipation according to Wilcoxon signed rank test

Parameter	Ranks	N	Mean Rank	Sum of Ranks	Z value	P value	Remark
Constipation BT - AT 7	NR	29	15	435	-4.971	0.000	S
	PR	0	0	0			
	Ties	1					
Constipation AT 7 – AT 15	NR	2	5.5	11	-1.897	0.058	NS
	PR	8	5.5	44			
	Ties	20					
Constipation AT 15 – AT 21	NR	9	5	45	-3.000	0.003	NS
	PR	0	0	0			
	Ties	21					
Constipation AT 21– AT 30	NR	0	0	0	-0.000	1.000	NS
	PR	0	0	0			
	Ties	30					

### 3.2.4 Effect of therapy on size of pile mass

There was a statistically significant difference in size of pile mass  $\chi^2(4) = 105.227$ ,  $p = 0.000$  (Table 8). The reduction in size of pile mass in 1<sup>st</sup> week was significant ( $Z = -5.064$ ,  $p = 0.000$ ). There was statistically significant reduction in size of pile mass during 2<sup>nd</sup> week of treatment ( $Z = -3.771$ ,  $p = 0.000$ ).

There were statistically significant reduction in size of pile mass during 3<sup>rd</sup> week of treatment ( $Z = -3.317$ ,  $p = 0.002$ ). There were no statistically significant reduction in size of pile mass during 3<sup>rd</sup> week of treatment ( $Z = -0.000$ ,  $p = 1.000$ ) (Table 12)

**Table 12:** Size of pile mass according to Wilcoxon signed rank test

Parameter	Ranks	N	Mean Rank	Sum of Ranks	Z value	P value	Remark
Size of pile mass BT - AT 7	NR	30	15.5	465	-5.064	0.000	S
	PR	0	0	0			
	Ties	0					
Size of pile mass AT 7 - AT 15	NR	15	8	120	-3.771	0.000	S
	PR	0	0	0			
	Ties	15					
Size of pile mass AT 15 - AT 21	NR	11	6	66	-3.317	0.001	S
	PR	0	0	0			
	Ties	19					
Size of pile mass AT 21 - AT 30	NR	0	0	0	-0.000	1.000	NS
	PR	0	0	0			
	Ties	30					

### 3.2.5 Effect of therapy on colour of pile mass

There was a statistically significant difference in color of pile mass  $\chi^2(4) = 103.899, p = 0.000$  (Table 8). The reduction in color of pile mass in 1<sup>st</sup> week was significant ( $Z = -5.203, p = 0.000$ ). There was statistically significant reduction in color of pile mass during 2<sup>nd</sup> week of treatment ( $Z = -3.317, p = 0.001$ ).

There were statistically significant reduction in color of pile mass during 3<sup>rd</sup> week of treatment ( $Z = -4.796, p = 0.000$ ). There were no statistically significant reduction in color of pile mass during 4<sup>th</sup> week of treatment ( $Z = -0.000, p = 1.000$ ) (Table 13)

**Table 13:** Colour of pile mass according to Wilcoxon signed rank test

Parameter	Ranks	N	Mean Rank	Sum of Ranks	Z value	P value	Remark
Colour of pile mass BT - AT 7	NR	0	0	0	-5.203	0.000	S
	PR	30	15.5	465			
	Ties	0					
Colour of pile mass AT 7 - AT 15	NR	11	6	66	-3.317	0.001	S
	PR	0	0	0			
	Ties	19					
Colour of pile mass AT 15 - AT 21	NR	23	12	276	-4.796	0.000	S
	PR	0	0	0			
	Ties	7					
Colour of pile mass AT 21 - AT 30	NR	0	0	0	-0.000	1.000	NS
	PR	0	0	0			
	Ties	30					

### 3.2.6 Effect of therapy on tonicity of anal sphincter

There was a statistically significant difference in tonicity of anal sphincter  $\chi^2(4) = 80.626, p = 0.000$  (Table 8). The reduction in tonicity of anal sphincter in 1<sup>st</sup> week was significant ( $Z = -4.549, p = 0.000$ ). There was statistically significant reduction in tonicity of anal sphincter during 2<sup>nd</sup>

week of treatment ( $Z = -0.688, p = 0.491$ ). There were statistically significant reduction in tonicity of anal sphincter during 3<sup>rd</sup> week of treatment ( $Z = -3.000, p = 0.003$ ). There were no statistically significant reduction in tonicity of anal sphincter during 3<sup>rd</sup> week of treatment ( $Z = 0.000, p = 1.000$ ) (Table 14)

**Table 14:** Tonicity of anal sphincter according to Wilcoxon signed rank test

Parameter	Ranks	N	Mean Rank	Sum of Ranks	Z value	P value	Remark
Tonicity of anal sphincter BT - AT 7	NR	26	13.5	351	-4.549	0.000	S
	PR	0	0	0			
	Ties	4					
Tonicity of anal sphincter AT 7 - AT 15	NR	11	10	110	-0.688	0.491	NS
	PR	8	10	80			
	Ties	11					
Tonicity of anal sphincter AT 15 - AT 21	NR	9	5	45	-3.000	0.003	NS
	PR	0	0	0			
	Ties	21					
Tonicity of anal sphincter AT 21 - AT 30	NR	0	0	0	0.000	1.000	NS
	PR	0	0	0			
	Ties	30					

### 3.3 Discussion

Bhesaja, Sastra, Kshara and Agni Karma are the main four treatment modalities indicated for Arshas in Ayurvedic literature. Acharya Susruta has clearly mentioned about the selection of these treatments on the basis of clinical features of Arshas. Shastra Karma which was told by Susruta is similar to the procedure of Haemorrhoidectomy mentioned in modern literature. There will be severe post-operative pain and blood loss while doing Shastra karma. If there is any injury to the ano-rectal ring during surgical procedures, it will cause for anal incontinence. Pratisaraneeya kshara karma in Arshas has proved better results by overcoming complications of Shastra karma. As per opinion of Susruta, Arshas which are soft, extensive, deeply situated and projectile in nature were indicated for kshara karma. Even though Apamarga Pratisaraneeya Kshara is used, the unavailability of Apamarga throughout the year is still a matter of concern. So the present study was undertaken to evaluate the efficacy of Saptachada Teekshna Pratisaraneeya Kshara in the management of Ardra Arsha. For this purpose 30 patients of first, second and third degree haemorrhoids were treated with Saptachada kshara.

#### 3.3.1 Discussion on observation

**Age:** In the present study, maximum number of the patients (40%) were from 31-40 years age group and second maximum patients from 20-30 years age group. It signifies patients with in 20-40 years age group belong to the active work phase of human life cycle. Patients neglects proper diet and lifestyle habits due to urgency and emergency of modern day to day life. This may cause for the high occurrence rate in this age groups.

**Gender:** Females (63.3%) were more suffering from haemorrhoids than the males (36.7%).

**Marital status:** Married patients (83.3%) suffered more with haemorrhoids than unmarried patients (16.7%).

**Occupation:** Maximum 60% of patients suffered from haemorrhoids those who are doing moderate nature of work. It includes work like who were working more than 6 hours in a day like students, housewives etc.

**Socio-Economic status:** Maximum of 43.3% patients was from middle class of the society and 30% were from poor class who suffered with haemorrhoids while compared with other groups.

**Chronicity:** In this series, maximum of 56.7% patients had less than 6 months chronicity, 13.3% had chronicity of 6 month –1 year, 13.3% had chronicity of 1 - 2 years, 13.3% had chronicity of above 3 years and 3.3% had 2- 3years

**Diet:** 90% of the patients of this series were habituated to mixed diet and 10% vegetarian diet. Non-vegetarian food contains high protein and fewer fibres. This fact also supports that less residual diet is an exacerbating factor for causation of the piles.

**Nature of bowel habits:** The maximum of 90% were found with constipated bowel habits and 10% of patients were found with regular bowel habits. Constipation is one of a causative factor for Arshas. Patient will do more straining for expelling constipated stool and this will cause for the dilatation of the

venous plexus.

**Position of pile masses:** Maximum 80% of patients had more than one number of primary haemorrhoids. In this maximum 46.7% patients had pile masses at 3, 7 & 11 O' Clock position.

#### 3.3.2 Discussion on results

##### i. Effect on Pain associated with defecation

In the first week after Kshara Karma, the complaints of pain associated with defecation had reduced in 28 patients and there was no increase in pain in any patients. The persistence of pain was present in 2 patients as previous. In the second week, the complaints of pain were reduced as compared to more than first week in 11 patients and increase in 6 patients. The persistence of same effect was seen in 13 patients as in first week. In third week, the complaints of pain had reduced more than second week in 6 patients and no increase in any patients. The persistence of same effect was seen in 24 patients as in second week. In fourth week no patients were reported with reduction or aggravation in the symptom of pain associated with defecation. Only in second week there was increase in pain in 6 patients. It was due to increased constipation and tonicity of anal sphincter. But it was reduced with in 3<sup>rd</sup> week by administration of Anulomana Dravyas. Over all, the pain associated with defecation was completely relived in a period of 21 to 30 days after the treatment.

##### ii. Effect on Bleeding per rectum

In the first week after Kshara Karma, the complaint of bleeding per rectum was reduced in 28 patients, no increase in any patients and the persistence of bleeding per rectum was in 2 patients as previous. In the second week, the complaints of bleeding per rectum was reduced more than first week in 1 patient, no increase in any patients and the persistence of same effect was in 29 patients as in first week. In third week and fourth week no patients were reported in reduction or aggravation in the symptom of bleeding per rectum.

One of the main symptoms and also the complication of Ardra Arshas are bleeding per rectum. This should be treated first because severe blood loss will cause anaemia. This study reveals that there was no increase in complaints of bleeding per rectum in any one of patients after 2<sup>nd</sup> week of treatment. Over all, the symptoms of bleeding per rectum were completely reduced during the period of 7 to 15 days after the treatment.

##### iii. Effect of therapy on Constipation

In the first week after Kshara Karma, the complaint of constipation was reduced in 29 patients, no increase in any patients and the persistence of constipation was in 1 patient as previous. In the second week, the complaints of constipation was reduced more than first week in 2 patients, increase in 8 patients and the persistence of same effect was in 20 patients as in first week. In third week, the complaint of constipation was reduced more than second week in 9 patients, no increase in any patients and the persistence of same effect was in 21 patients as in second week. In fourth week no patients were reported in reduction or aggravation in the symptom of constipation. Constipation is one of the main causes for Haemorrhoids. Constipation was controlled in whole study period. But in 2<sup>nd</sup> week, there was increase in constipation in 8 patients, it was managed with proper Anulomana Dravyas. Over all, the symptom of constipation was completely relived during a period of 21 to 30 days after the treatment.

#### iv. Effect on size of pile mass

In the first week after Kshara Karma, the size of pile mass was reduced in 30 patients and there was no increase in any patients. In the second week, the size of pile mass was reduced more than first week in 14 patients, no increase in any patients and the persistence of same reduction on size was in 16 patients as in first week. In third week, the size of pile mass was reduced more than second week in 11 patients, no increase in any patients and the persistence of same reduction on size was in 19 patients as in second week. In fourth week no patients were reported in reduction or aggravation in size of pile mass. The coagulation of protein in haemorrhoidal plexus leads to disintegration of haemoglobin into haem and globin. Due to corrosive nature of Kshara, it cauterises the pile mass. Due to these actions results in decreasing the size of the pile mass. In the present study the size of pile mass was completely got relived in all patients during the period of 21 to 30 days after the treatment.

#### v. Effect on colour of pile mass

In the first week after Kshara Karma, there was no reduction in colour of pile mass in all patients. In the second week, the colour of pile mass was reduced more than first week in 11 patients, no increase in any patients and the persistence of same colour was in 19 patients as in first week. In third week, the colour of pile mass was reduced more than second week in 23 patients, no increase in any patients and the persistence of same reduction on colour was in 7 patients as in second week. After fourth week no patients were reported in reduction or aggravation in colour of pile mass. The normal colour of Ardra Arshas observed in this study was bluish red. Ideally improvement in the course of treatment would be valid only if the colour would reduce to a lighter shade as in the colour of the anal mucosa (pinkish) than in comparison to the first stage (bluish red). But as observed, due to the corrosive nature of Kshara, rather than going for a lighter shade, it turns to Pakwa Jambu Phala Varna (reddish black) which is a darker shade. Hence as per the result with respect to colour of pile mass, there was an increase in all 30 patients rather than reduction in colour in 1<sup>st</sup> week. Gradually within 30 days, the colour transformed to normal anal mucosa colour (pink) in all 30 patients.

#### vi. Effect on tonicity of anal sphincter

In the first week after Kshara Karma, the tonicity of anal sphincter was reduced in 26 patients, no increase in any patients and the persistence in tonicity of anal sphincter was in 4 patients as previous. In the second week, the tonicity of anal sphincter was reduced more than first week in 11 patients, increase in 8 patients and the persistence of same reduction on tonicity of anal sphincter was in 11 patients as in first week. In third week, the tonicity of anal sphincter was reduced more than second week in 9 patients, no increase in any patients and the persistence of same reduction on tonicity of anal sphincter was in 21 patients as in second week. In fourth week no patients were reported in reduction or aggravation in tonicity of anal sphincter. Over all, the tonicity of anal sphincter was completely relived in a period of 21 to 30 days after the treatment.

### 3.3 Probable mode of action of Saptacchada Teekshna Pratisaraneeya Kshara

Pratisaraneeya Kshara acts on haemorrhoids in two ways (1) It cauterizes the pile mass directly because of its Ksharana Guna

(corrosive nature) and (2) It coagulates protein in haemorrhoidal plexus. The coagulation of protein leads to disintegration of haemoglobin into haem and globin. Synergy of these actions results in decreasing the size of the pile mass. Further, necrosis of the tissue in the haemorrhoidal vein will occur. This necrosed tissue sloughs out as blackish brown discharge for 3 to 7 days. The haem present in the slough gives the discharge its colour. The tissue becomes fibrosed and scar formation is seen. The haemorrhoidal vein obliterates permanently and there is no recurrence of haemorrhoids.

#### 4. Conclusion

30 patients of Ardra Arshas were studied in detail after application of Saptacchada Teekshna Pratisaraneeya Kshara. Based on the observations of the present study, Arshas was present in almost all the age groups with maximum of 40% patients in the age between 31-40 years. Both male and females sex were almost equally affected by haemorrhoids. Maximum 80% of patients had more than one number of primary haemorrhoids. Arshas is one of occupational hazard as more number of moderate work patients like house wives, students etc. were found in the present study. Kshara is alkaline in nature pH value of alkali range from 7 to 14. The pH value of Saptacchada Teekshna Pratisaraneeya Kshara prepared for the study was 10.31. Kshara was applied only once to the pile masses each which was present in positions like 3, 7 & 11 o'clock. The pile masses got Pakwa Jambu Phala Varna within a period of Shata Matra Kala. The symptom of bleeding per rectum was completely relieved in all patients within 15 days after Kshara karma. Other features like pain associated with defecation, constipation, size of pile mass, colour of pile mass and tonicity of anal sphincter were completely relieved in all patients during the period of 21 to 30 days after Saptacchada Teekshna Pratisaraneeya Kshara Karma. No recurrence was found after 3 month of follow up. Hence Saptacchada Teekshna Pratisaraneeya Kshara Karma was considered as the better treatment in the management of Ardra Arshas.

#### 5. References

1. Sharma PV. Susruta Samhita. Reprint ed. Varanasi: Chaukhambha Visvabharati, 2013, 1, 316.
2. Corman ML. Colon and Rectal surgery. Edn 5, New York: Lippincott Williams and Wilkins, 2005, 177.
3. Sharma PV. Susruta Samhita. Reprint ed. Varanasi: Chaukhambha Visvabharati, 2013, Vol. 1, 116.
4. Sharma PV. Susruta Samhita. Reprint ed. Varanasi: Chaukhambha Visvabharati, 2013, Vol. 2, 21-2.