

ROLE OF *SNUHI KSHAR* ON INTERNAL HAEMORRHOIDSDr. Anjali Tamori*¹, Dr. Vishal Verma² and Dr. Sheetal³

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ABSTRACT

Background: Haemorrhoids commonly known as piles is quite common ailments that affect mankind. It is commonly seen in the people who work in sitting position for many hours such as driver, bank manager, tailors, shopkeeper, etc. According to *Ayurveda*, the disease is mentioned under the heading of *Maharogas*^[1] because it is *Dirghakalanubandhi*, *Duschikitsya* in nature and involves the *Guda Marma*.^[2] There are different methods of treatment are described in *Ayurveda* for the management of *Arsha* based on its severity. In *Ayurvedic* treatise, several methods of treatments like *Bhaisajakarma*, *Shastrakarma*, *Ksharakarma*, *Agnikarma* and *Raktamokshana* etc. are advised for *Arsha*. Among them *Pratisarneeeya Kshara* is one, which replaces the surgical intervention even and cures the condition without

the help of surgical intervention. **Aims:** The present study aimed to evaluate efficacy of *Snuhi Kshar* in the management of internal piles. **Material and Methods:** In the present study total 15 patients in the age group of 16-65 years were registered; n=15; (*Snuhi Kshar* application was done). **Result:** In subjective parameters, such as Pain/Discomfort, itching and constipation, there was good result observed in trial after *Snuhi Kshar* application. Significant result with (p<0.05) was obtained in Pain/discomfort and itching. 6.67% patient had complete remission, marked improvement was obtained in 80% patients, and 13.33% patient got Moderate relief. **Conclusion:** Finally it was concluded from the clinical trial that overall

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effect of *Tikshana Snuhi Kshara* was highly effective in reducing subjective and objective variables.

KEYWORDS: *Arsha*, Piles, Pile mass, *Pratisarneeya Kshar*, *Snuhi Kshar*.

INTRODUCTION

Present time is the era of fast foods, irregularity in food timing, changing food style and sedentary life and mental stress, all these factors disturb the digestive system, resulting into many diseases and among them one important group is that of anorectal disorders. Among these Haemorrhoids commonly known as piles is quite common in the society. The primary cause of anorectal disorders is *Jatharagni's* derangement^[3], which in turn leads to constipation. Constipation increases the back pressure to produce piles into the haemorrhoidal veins.

Ayurveda, the science of life, has also studied this disease with all its regards. A wide spectrum of description is available including its definite etio-pathogenesis and a number of treatment methods.

Curative techniques like Barron band ligation, Cryosurgery, Forceful anal stretching, Infrared photo coagulation are now a days in practice in many of clinics for the management of Haemorrhoids.^[4] Unfortunately these invented techniques have got one or the other type of limitations as well as have not been proven free from post-operative complications. All these procedures are contenting their own limitations with the greater rate of complications, recurrence etc. and for these reasons there is a continuous search for newer method.

Kshara treatment is very much suitable and acceptable as compared to prevalent methods in modern medical science. *Sushruta* explained two types of *kshara* in the treatment of *Arsha*, *Paneeya* and *Pratisarneeya*.^[5] *Snuhi Pratisarneeya Kshar* was selected for the study due to its *Arshoghna* property.

AIMS AND OBJECTIVES

1. To find out efficacy of *Snuhi Kshar* in the form of *Kshar Patan* in the Management of first and second degree of *Arsha*.
2. To note the adverse effect of the trial drug, if any.

MATERIALS AND METHODS

Sample size

Total 15 patients were selected randomly for the study, with ages ranging from 16yrs to 65 years, irrespective of, religion, sex etc.

Source of subjects

OPD / IPD of *Shalya Tantra*, Rishikul Ayurvedic college and hospital haridwar.

Informed consent

The research study was clearly explained to the subjects, and prior to starting the trial their signed, written informed consent was adopted.

Kshar: *Snuhi Prateesarniya Kshar*

Method of preparation of Kshar^[6]

- **Step 1- Ash Preparation:** The collected dried, weighed *Snuhi* was kept in a spacious place and some pieces of lime stones was also put into the heap of the drug and set on fire.
- **Step 2-**Next day when the fire has become extinct, the ashes of the *Snuhi* and lime stone was collected seperately. In the same manner *Arka* may be burnt and the Ash collected. The ash was weighed and transferred to a separate, clean vessel.
- **Step 3-**The ash was put in to six times of water in 1:6 proportions; the mixture was stirred well, mixed well and then allowed to settle down on its own for 24 hours.
- **Step 4-** Next day supernatant was separated carefully by decanting in a separate vessel and filtered through cotton cloth 21 times and the settled hard material was discarded.
- **Step 5 -** Decanted supernatant was taken in Stainless Steel vessel and boiled, with stirring slowly and constantly till it turns to viscous, red tinched liquid. This *Kshara Jala* was taken in one and half liter quantity and red hot *Shankhanabhi*, *Jalashukti*, *Katasharkara* and *Bhasmasharkara* was suddenly quenched in it.
- **Step 6 -**This quenched *Kshara Jala* was further decanted and filtered in hot condition with four fold cotton cloth. Then mixture of churn of *Prativap Dravyas Danti*, *Chitrak*, *Praval*, *Ativisha*, *Vacha*, *Langali*, *Hingu*, *Vidalavana* etc. were added to *Kshara Jala* and heating was continued with intermittent stirring.

- **Step 7** - When the whole material became neither very solid nor very liquid, it is taken out of the oven, poured into iron vessel having a lid and preserved carefully for further use.
- The pH value of this prepared *Snuhi Pratisarneeya Kshara* was 13.68.

Procedure

15 Patients with I & II degree Internal Haemorrhoids were selected. Confirmation of location and size of haemorrhoids was done with the help of proctoscope and then *Snuhi Kshar* application was done on haemorrhoids under L.A. After applying *Kshara* on int. haemorrhoids wait for 2 minutes and then washed with *Nimbu swarasa*.

Patients were advised to consult immediately, if any discomfort or adverse reaction is felt in the course of treatment. They were also advised to attain the O.P.D. for follow-up.

Time frame: 60 days follow-up.

Data was recorded before treatment and after treatment on subjective and objective criteria and entered in a special clinical proforma.

STUDY DESIGN

Inclusion Criteria

- Patients of age group between 16 years to 65 years.
- Patients of any sex, caste, religion & occupation.
- Patients who are suffering from first and second degree of *Arsha* will be selected in this study.

EXCLUSION CRITERIA

- Age less than 16 years and more than 65 years.
- 3rd and 4th degree of piles.
- *Arsha* associated with CA rectum, thrombosed & strangulated piles, rectal prolapse and fistula in ano.
- Hepatitis-B, HIV, HCV and VDRL positive cases will be excluded.

INVESTIGATIONS

Blood investigations- Routine haematological examination such as Hb%, TLC, DLC, ESR, CT, BT, RBS, LFT, KFT, HbsAg, HIV, HCV, **Urine:-** Routine & microscopic, **Stool:-** Routine & microscopic (If required) was carried out.

ASSESSMENT CRITERIA**Subjective criteria****1) Pain/Discomfort**

Assessed by MRC (Medical Research Council) scale.

Grade 0- Absence of pain

Grade 1- Mild pain- that can easily be ignored

Grade 2- Moderate pain- that can't be ignored, and needs treatment from time to time.

Grade 3- Severe pain- that is demanding constant attention.

2) Itching

Grade 0- No itching

Grade 1- Once or twice a day

Grade 2- Often in a day and discomfort

Grade 3- Severe itching and discomfort whole day

3) Constipation

Grade 0- Easy evacuation

Grade 1- Hard stool once a day

Grade 2- Hard stool after two days

Grade 3- Hard stool after more than 2 days

OBJECTIVE CRITERIA**1) Bleeding per Anus**

Grade 0- No bleeding

Grade 1- Soiling of faeces with blood or staining of hand / tissue paper on cleaning after defecation

Grade 2- Drop by drop- 5 to 10 drops

Grade 3- Drop by drop- > 10 drops/ during entire act of defecation

Grade 4- Splashes in the pan

2) Number of pile mass**Grade 0-** No pile mass**Grade 1-** One pile mass**Grade 2-** Two pile mass**Grade 3-** Three pile mass**3) Size of pile mass****Grade 0-** Almost none**Grade 1-** Size of the tip of little finger (approx. 1 cm)**Grade 2-** Size of the tip of index finger (approx. 2 cm)**Grade 3-** Size of the tip of thumb (approx. 3 cm)**4) Mucous Discharge****Grade 0-** No discharge of Mucous**Grade 1-** Occasional Mucous Discharge**Grade 2-** Mucous Discharge with Every Motion**Grade 3-** Only Mucous Discharge without Stool**Assessment criteria for overall effect of therapy**

- | | | |
|-------------------------|---|---------------------------|
| 1. Complete remission | : | 100% improvement |
| 2. Marked Improvement | : | 75% to <100% improvement |
| 3. Moderate Improvement | : | 50% to <75% improvement |
| 4. Mild Improvement | : | 25% to <50% improvement |
| 5. Unchanged | : | less than 25% improvement |

OBSERVATIONS

A total of 15 patients having 1st & 2nd degree of internal piles were registered. Among 15 patients in the present study, maximum no. of patient i.e. 46.67% belonged to age group of 30-40 and 33.33% patient were belong to age group 40-65 years. Maximum number of patient i.e. 86.67% were male. Maximum no. of patient were belonged to Hindu religion i.e. 93.33%. 53.33% of patient were doing service. 86.67% of patient were from middle class. 60% of patient were having urban dwelling Status. 73.33% of patient were having moderate appetite. 80% of patient were married. Maximum 60% patient were not having any addiction followed by 26.67% of patient were addicted by Smoking. 73.33% of patient were having mixed Diet. 46.67% of patients were having prolonged sitting type and also long standing

type of nature of work. 60% of patient were having Regular bowel habit and 40% were having irregular. 80% of patient were having hard stool bowel habit. 73.33% of patient were having bleeding per rectum. 93.33% of patient were having Prolapse of piles. 40% of patient were having pricking type of pain. 53.33% of patient were having family history. 46.67% of patient were having *Vata-Pitta prakriti*. 66.67% of patient were having *Madhyam Sara*. 93.33% of patients were having *Madhyam Ahara Shakti*.

EFFECT OF THERAPY

Table: Effect on Pain/Discomfort.

Pain or Discomfort	mean	N	Sd	Se	mean diff	% improvement	t value	p value	Significance
BT	1.53	15	0.52	0.13	1	73.33 %	0	≤0.05	S
AT	0.53		0.52	0.13					

The mean score of **Pain or Discomfort** was 1.53 before treatment which reduced to 0.53 after treatment which is statistically significant ($p < 0.05$). And the relief is 73.33%.

Table: Effect on Itching.

Itching	mean	n	sd	se	mean diff	% improvement	t value	p value	Significance
BT	1.47	15	0.52	0.13	1.14	83.33 %	12.47	≤0.05	S
AT	0.33		0.49	0.13					

The mean score of **Itching** was 1.47 before treatment which reduced to 0.33 after treatment which is statistically significant ($p < 0.05$). And the relief is 83.33%.

Table: Effect on Constipation.

Constipation	mean	N	Sd	se	mean diff	% improvement	t value	p value	Significance
BT	1.13	15	0.35	0.09	1.07	96.67 %	16	≤0.05	S
AT	0.06		0.26	0.07					

The mean score of **Constipation** was 1.13 before treatment which reduced to 0.06 after treatment which is statistically significant ($p < 0.05$). And the relief is 96.67%.

Table: Effect on Bleeding per Anus.

Bleeding per Anus	mean	N	sd	se	mean diff	% improvement	t value	p value	Significance
BT	2.2	15	0.67	0.17	1.93	88.89 %	10.64	≤0.05	S
AT	0.27		0.46	0.12					

The mean score of **Bleeding per Anus** was 2.2 before treatment which reduced to 0.27 after treatment which is statistically significant ($p < 0.05$). And the relief is 88.89%.

Table: Effect on No. of Pile Mass.

No. of pile mass	mean	n	sd	se	mean diff	% improvement	t value	p value	Significance
BT	1.87	15	0.91	0.23	1.54	85.56%	7.12	≤0.05	S
AT	0.33		0.48	0.12					

The mean score of **No. of pile mass** was 1.87 before treatment which reduced to 0.33 after treatment which is statistically significant ($p < 0.05$). And the relief is 85.56%.

Table: Effect on Size of Pile Mass.

Size of pile mass	mean	N	Sd	se	mean diff	% improvement	t value	p value	Significance
BT	1.93	15	0.45	0.11	1.53	81.11%	11.5	≤0.05	S
AT	0.4		0.50	0.13					

The mean score of **Size of pile mass** was 1.93 before treatment which reduced to 0.4 after treatment which is statistically significant ($p < 0.05$). And the relief is 81.11%.

Table: Effect on Mucous Discharge

Mucous discharge	mean	n	Sd	se	mean diff	% improvement	t value	p value	Significance
BT	1.53	15	0.51	0.13	1.27	86.67%	10.71	≤0.05	S
AT	0.26		0.45	0.11					

The mean score of **Mucous discharge** was 1.53 before treatment which reduced to 0.26 after treatment which is statistically significant ($p < 0.05$). And the relief is 86.67%.

RESULTS

- In patients having Pain/Discomfort, the percent relief was 73.33% after application of *Snuhi Kshar* and this value was statistically significant ($p < 0.05$).
- Itching was relieved by 83.33%. This was statistically significant ($P \leq 0.05$).
- Constipation was relieved by 96.67% and showed significant results with p value ($p < 0.05$).
- *Snuhi Kshar* shows significant results in reducing Bleeding per Anus with 88.89%, showed significant results with p value ($p < 0.05$).
- No. of pile mass was reduced and percent relief was 85.56% shows statistically significant results ($p < 0.05$).
- Size of pile mass was reduced and the percent relief was 81.11% shows statistically significant results with ($p < 0.05$).
- Mucous discharge showed significant results with p value ($p < 0.05$) and the relief was 86.67%.

Overall effect of therapy

After applying *Snuhi Kshar*, 6.67% patient got complete relief, 80% patient got marked improvement and 13.33% patient got moderate improvement.

Overall Effect of the *Snuhi Kshar* was 85.07%.

Table: Overall effect of *Snuhi Kshar*.

Category	no. of patients	% of patients
Complete remission: 100% Improvement	1	6.67 %
Marked Improvement: 75% to <100% Improvement	12	80 %
Moderate Improvement: 50% to <75% Improvement	2	13.33 %
Mild Improvement: 25% to < 50% Improvement	0	0
Unchanged: <25% Improvement	0	0

DISCUSSION**Discussion on general observations**

In this study, 46.67% patient were belonged to age group of both 30-40 years and 33.33% were belonged to 40-65 years of age group. Maximum patients were from both age group of 30-40 years and 40 -65 years. As patients in this group busy in their profession, do not care about proper diet, inappropriate fluid intake and fast food intake may be the explanation for more hemorrhoid incidence in this age group. Maximum patient 86.67% were of male sex and remaining 13.33% was female. It may be because more male patients report to ano-rectal hospital. Female patients neglect ano-rectal diseases due to shyness and do not report to hospital until their daily life is disrupted by illness. 53.33% patients were from service. Individuals of the service class are used to undergo long sitting and irregular schedule. Irregular eating patterns contribute primarily to the haemorrhoids. 86.67% patient were from middle class, this could be due to pressure to do work harder and take unhealthy and inopportune diets. 73.33% patient were having Mixed Diet, this could be due to there is not much fibrous food in the diet and because of that constipation can occur and eventually haemorrhoids can develop. 80% patient were having hard stool bowel habit. During defecation, hard stool causes much pressure on the valve less rectum blood vessels which ultimately causes the development of pile masses. 73.33% patient were having bleeding per rectum, bleeding was caused by mucosal laceration and elevated pressure in the haemorrhoidal plexus, which is the normal patho-physiology of the internal piles/*Arsha*. 46.67% patient were having *VP prikriti*. This data show that the *Vata* and *Pitta* dominant people are more sufferer of *Arsha*. 50% patient were having *Manda Agni*, *Mandagni* is the main reason for this disease and causes the *Arsha* infestation.

Discussion on Effect of Therapy

- Pain or Discomfort was relieved by 73.33%. Pain might be reduced due to *Ksharana*, *Pachana*, *Amahara*, and *Tri Doshahara* properties of *Kshara*.^[7]
- There was significant relief in Itching by 83.33% after applying *Snuhi Kshar*. Itching is usually developed due to mucus discharge and infection in ano-rectal region and it might be reduced due to *Pachana*, *Amahara*, and *Tri Doshahara* properties of *Kshara*.^[8]
- *Snuhi Kshar* showed significant result in constipation with 96.67%. This may be due to *Snuhi Kshar* is more effective in reducing size of pile mass, because of that obstruction to pass stool was removed.
- *Snuhi Kshar* in reducing bleeding per anus was very effective as percentage relief for bleeding by *Snuhi Kshar* was 88.89%. This might be happened due to *Snuhi Kshar* having properties like *Stambhana*, *Pachana* and *Dahana* properties which are responsible for haemostasis.^[9]
- After *Snuhi Kshar* application, the relief was 85.56% in reducing number of pile mass. No. of pile mass might be reduced due to *Vilayana*, *Shodhana*, *Shoshana*, and *Lekhana* properties of *Kshar*.^[10]
- *Snuhi Kshar* shows effective result in reducing size of pile mass with the relief of 81.11%. Size of pile mass may be reduced due to *Pachana*, *Vilayana*, *Shoshana*, *Lekhana* and *Shodhana* properties of *Kshar* and it may also be due to its *Chedana*, *Bhedana* and *Lekhana* properties.^[11]
- Mucous discharge after *Snuhi Kshar* application showed very effective result with 86.67%. Discharge per rectum may be reduced due to *Shoshana*, *Tikshana*, *Stambhana*, and *Dahana* properties of *Kshara*.^[12]
- There was very effective relief was observed in itching, bleeding per rectum, No. of pile mass, size of pile mass and mucous discharge after *Snuhi Kshar* application. The pH value of *Snuhi Kshar* was 13.68. This values shows that the *Snuhi Kshar* was having *tikshna* properties of *Kshar* and because of that *Snuhi Kshar* shows significant results.

Probable Mode of Action of *Kshara Lepa*

There are two ways through which *Kshar* acts on haemorrhoids –

- *Kshara* directly cauterizes the tissue by means of its *Ksharana Guna* (Corrosive properties).^[13]

- *Kshara* coagulates the tissue protein that directly causes local pile mass necrosis, and finally the necrosed pile mass sloughed off.

Protein coagulation causes the haemoglobin to disintegrate into haem and globine. The combination of these behavior ensures that the size of the pile mass decreases. Additionally, tissue necrosis will occur in the haemorrhoidal vein. This necrosed tissue slough out as brown discharge. The haemorrhoidal vein permanently obliterates, and haemorrhoids do not recur. The mode of action starts immediately after application on the tissue.

CONCLUSION

Main aim of this study was to evaluate the effect of *Snuhi Kshar*. After observing all statistical analysis it can be concluded that *Snuhi Kshar* was effective in control of bleeding per anus in *Arshas* and also are effective in reducing itching, mucous discharge, size and No. of pile mass without complications. Overall effect of *Tikshana Snuhi Kshar* showed significant results in the management of *Arsha* (1st and 2nd degree internal piles).

pH value of *Snuhi Kshara Lepa* was 13.68 which was prepared for the present study. These values shows that the *Snuhi Kshar* was having *tikshna* properties of *Kshar* and because of that it shows significant result.

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