



Preparation of Snuhi Saptaparna Ksharsutra and Its Role in Surgical Practice

*Pallavi Suman¹, Sachin Gupta², Saurabh Sharma³, Kainat Ansari⁴, Shruti Saraswat⁵, Rachit Gupta⁶

¹⁻⁶Department of Shalya Tantra, Patanjali Bhartiya Ayurvedigyan Evum Anusandhan Sansthan, Haridwar

*Email: pallavi.suman12@gmail.com

ABSTRACT

Ayurveda is one of the most renowned traditional systems of medicine that has survived and flourished from ages till date having various branches like sharir rachna, sharir kriya, kaya chikitsa, shalya tantra, shalakyata tantra etc. Among these branches ras shashtra and bhashajya kalpna are branches of Ayurveda dealing with the knowledge of preparation of various types of medicines like Vati, Asava, Arishta, Churna, Avleha and Kshara etc. Kshara is the herbal extracts of plants like Saptaparna (*Alstonia Scholaris*) Apamarga (*Achyranthes aspera* Linn.), Mulaka (*Raphanus sativus* Linn.), Snuhi (*Euphorbia nerifolia* Linn.), Aragwadha (*Cassia fistula* Linn.), Kutaja (*Holarrhena antidysenterica* Linn.), Vasa (*Adhatoda vasica* Linn.) and Arka (*Calotropis gigantea* Linn.). Kshara can be a compound or mixture of many herbs or may be from single herb. Snuhi Saptaparna Ksharsutra is prepared from the Saptaparna Kshara along with Snuhi Ksheera and Haridra. **Keywords** : Kshara, Ksharsutra, Saptaparna, Ayurveda, Alkaline preparations

Received 10.08.2023

Revised 12.09.2023

Accepted 19.10.2023

INTRODUCTION

Ksharsutra- an Ayurvedic para-surgical measure is used in the treatment of Nadi Vrana (sinus), Bhagandara (fistula- in - ano), arbuda (excision of small benign tumour) etc. by using different medicinal plants.

तत्र क्षरणात् क्षणनाद्धा क्षारः ।। (सू.सू. 11/4)

Kshara is a preparation of plant drugs ashes in the form of, powder, solutions or crystals which are alkaline in nature. This preparation is called Kshar because it causes ksharana to mansa and other Dhatus. Acharya Sushruta said that kshar can perform chedana, bhedana and lekhana karmas [1].

In the textual reference of Chakradatta and Rasatarangini we get only indication of the thread made up of Snuhi, apamarga and Turmeric. Susruta describes about many kinds of Kshars like Saptaparna, Karaveera, Palasa, Kadali etc. in Susruta Samhita.

According to Acharya Sushruta [2]

1. **Pratisaraniyakshara** (External application): The kshara which is used for local application to treat the various diseases.
2. **Paneeeya kshara** (Oral administration): The liquid solution of kshara administered orally to treat the different gastrointestinal diseases.

Characteristics of Kshara [3]

नानौषधिसमवायदोषघ्नः शुक्लत्वात्सौम्यः तस्यसौम्यस्यापिऽतोदहनपाचनदारणादिशक्तिरविरुद्ध,
आग्नेयौषधिगुणभूयिष्ठत्वात्कटुकउष्णस्तीक्ष्णः पाचनोविलयनशोधनोरोपणः शोषणः स्तम्भनोलेखनः
कृम्यामकफकुष्ठविषमेदसामुपहन्तापुंस्त्वस्यचातिसेवतः ।। (सू.सू. 11/5)

KSHAR GUNA [4]

According to Acharya Sushruta

नैवतितीक्ष्णौ न मृदुः शुक्लः श्लक्ष्णोऽथपिच्छिलः ।

अविष्यन्दी शिवः शीघ्रः क्षारो ह्यष्टगुणः स्मृतः ।। (सू.सू. 11/18)

Table: 1- Rasapanchak a and other properties of Kshara

Rasa	Katu
Anurasa	Lavana
Guna	Tikshna, Aagneya, Slakshna
Virya	Ushna
Vipaka	Katu
Doshaghata	Tridoshaghna
Karma	Dahana, Pachana, Darana, Vilayan, Shodhana, Ropana & Stambhana etc.

MATERIAL AND METHODS

Preparation of Saptaparna Kshara

Saptaparna raw drug was procured from local area in Haridwar, India and were dried and burnt to ash in a large iron pan. The grey-coloured ash was collected, which is devoid of mud, stones and charcoal. The total volume of this ash was mixed with 6 times of water and the mixture was left overnight. The next morning, only the supernatant fluid was collected, discarding the dark-coloured sediment in the bucket. The supernatant fluid thus obtained was filtered 21 times using a cotton cloth to obtain *Gaumutra Varna Ksharajala*. This *Ksharajala* was heated over an iron pan in mild- moderate flame with intermittent stirring for about 3 hours till it turned to reddish-yellow (*Ishat Raktavarna*). When the *Ishat Raktavarna* is attained then it is called as *Mridu Kshara*. This *Kshara* was then used to prepare the *Sunhi Saptaparna Ksharsutra*.

Table 2: pH value of Kshara)

INGREDIENTS	pH value
<i>Saptaparna Kshara</i>	10.93

Saptaparna Kshar Nirman

**Fig. 1: Saptaparna Kshar Formation**

KSHARASUTRA

Ksharasutra is a well-established procedure in the management of fistula-in-ano with a high success rate [5]. *Ksharasutra* is emerging as a very effective tool to replace the regular surgical procedures, which have higher recurrence rate and higher possibility of incontinence as post operative complication, in the management of fistula in ano. It is a simple medicated thread and the procedure of application is the non-operative, para-surgical and ambulatory therapeutic technique [6].

Description of Ksharasutra in Classical Era [7]

1- **Acharya Charaka** - In the chapter *Sotha Chikitsa* mentioned the use of *Ksharasutra* in the management of *Bhagandara* with other measures (*Ch. Chi. 12*).

2- **Acharya Sushruta** - mentioned the use of *Ksharasutra* in *Nadivrana Chikitsa*. (*Su. Chi. 17*)

Ksharsutra Preparation -

Authentic reference regarding the preparation of *Ksharasutra* is available in *Arshodhikara* of **Chakra Dutta**

भावितरजनीचूर्णस्नुहीक्षीरेः पुनः पुनः ।
बन्धनात्सुदृढसूत्रोभिनत्यर्शोभगन्दरं ।

(चक्रदत्त अर्शरोगधिकार 5 / 148)

Technique

The standard technique for the preparation of *ksharsutra* was developed in *Shalya Tantra* Department of B.H.U and approved by I.C.M.R. for standard *Snuhi – Apamarga Ksharsutra*. By taking that reference, *Snuhi Saptaparna Ksharsutra* is prepared.

Drug requirements for *Kshar Sutra* preparation

- *Snuhi ksheer*
- *Saptaparna Kshara*
- *Haridra churna*

Method of Preparation:

At first the thread is spread out length wise in the hangers specially designed for this purpose. The *Snuhi Ksheer* is now smeared on the thread on its whole length with the help of a gauze piece. Hands should be gloved before doing smearing. The wet threaded hanger is now placed inside *Ksharsutra* cabinet. It is dried for a day. On the next day, the dried threads are again smeared with *Snuhi Ksheer*. This process is repeated for 11 days. On the 12th day, the thread is again smeared with *Snuhi Ksheer* mixed with *Saptaparna kshara* powder. The thread is now allowed to dry in cabinet. The same procedure is repeated seven times. At 19th day, the dried thread is smeared again with *Snuhi Ksheer* mixed with *haridra* powder. The process is repeated for 3 consecutive days. In this way a thread has total of 21 coatings. After 21 coatings are completed, each thread measuring about 10-11 inches should be cut away from hangers and sealed in glass tube or polythene packs.

Table 3: Coating preparation of *Snuhi Saptaparna Ksharsutra*

<i>Snuhi Saptaparna Kshar sutra</i>	Coatings
<i>Snuhi Ksheer</i>	11
<i>Snuhi Ksheer + Saptaparna Kshara</i>	7
<i>Snuhi Ksheer + Haridra Churna</i>	3
Total coatings	21

Table 4: Different pH value of *Ksharsutra* ingredients

INGREDIENTS	pH value
<i>Saptaparna Kshara</i>	10.93
<i>Snuhi Ksheer</i>	5.8
<i>Haridra churna</i>	6.5
<i>Snuhi Saptaparna Ksharasutra</i>	9.80

Advantages of *Ksharsutra*: *Ksharsutra* ligation is a chemical *fistulotomy* than surgical *fistulotomy*. It is a simple, safe and minimum invasive surgical treatment for *Fistula-in-ano* with lower recurrence. In *Ayurveda* it is a cost-effective management which can be performed in minor O.T. condition.

INDICATIONS OF KSHARSUTRA IN SURGICAL PRACTICE [8]

1. *Fistula-in-Ano (Bhagandara)*

- **Indication:** One of the most common uses of *Ksharsutra* is for the treatment of **fistula-in-ano**, a condition where an abnormal tract forms between the anal canal and the perianal skin.
- **Mechanism:** The *Ksharsutra* is placed in the fistula tract, where it helps in gradually cutting through the fistula tissue, promoting healing while also preventing recurrence of the tract.
- **Benefits:** Minimizes the need for invasive surgery, reduces the risk of incontinence, and supports the body in healing naturally.

2. *Hemorrhoids (Arsha)*

- **Indication:** *Ksharsutra* is used to treat **hemorrhoids**, particularly internal and prolapsed hemorrhoids.
- **Mechanism:** The *Ksharsutra* is tied around the hemorrhoidal mass, where its medicated properties work to shrink and dry out the hemorrhoidal tissue, leading to gradual detachment and healing.

- **Benefits:** This therapy is minimally invasive and effective in reducing hemorrhoid size, relieving symptoms such as bleeding and pain.

3. Chronic Fissures (*Parikartika*)

- **Indication:** For treating **chronic anal fissures** that have not healed with conventional methods.
- **Mechanism:** *Ksharsutra* can be used to promote healing by stimulating blood flow to the affected area and assisting in the healing of the fissure. It also helps in softening the surrounding tissues.
- **Benefits:** *Ksharsutra* helps in providing a natural alternative to surgery for chronic fissures.

4. Anal Warts

- **Indication:** Used in cases of **anal warts** or **condylomata acuminata** around the anal area.
- **Mechanism:** The *Ksharsutra* is applied to the wart tissue, where its cauterizing properties help in the gradual destruction of the warts, leading to resolution of the condition.
- **Benefits:** Minimizes scarring and offers a non-invasive solution to anal warts.

5. Sinus Tract and Abscess

- **Indication:** In cases of **sinus tract** or **perianal abscess**, where there is an abnormal channel or infection between the anal canal and the skin.
- **Mechanism:** *Ksharsutra* can help to drain the abscess and promote healing of the sinus tract by eliminating infection and facilitating tissue repair.
- **Benefits:** Helps in faster drainage of pus and prevents the recurrence of the abscess.

6. Pilonidal Sinus

- **Indication:** For the treatment of **pilonidal sinus**, which is a condition that occurs near the tailbone and involves hair follicles becoming infected and forming a sinus.
- **Mechanism:** The *Ksharsutra* is used to treat the sinus tract and promote healing, as well as help in preventing recurrence by cauterizing the infected tissue.
- **Benefits:** A non-surgical method for treating pilonidal sinus, reducing the need for excision.

7. Chronic Wounds and Ulcers

- **Indication:** *Ksharsutra* may be used in cases of chronic, non-healing ulcers or wounds in the perianal region.
- **Mechanism:** The *Ksharsutra* helps in cleansing the wound, eliminating infection, and promoting healing by encouraging the growth of healthy tissue.
- **Benefits:** Promotes faster healing of chronic wounds by stimulating natural healing processes.

8. Chronic Anal Infections

- **Indication:** Used for the treatment of chronic anal infections or abscesses that do not respond well to conventional medical treatments.
- **Mechanism:** The *Ksharsutra* helps to manage the infection, reduce inflammation, and speed up recovery by promoting tissue regeneration.

CONTRA-INDICATIONS OF *KSHARSUTRA* [8]

Sinuses which are connected with the following lesions away from the ano-rectal canal constitute definite contraindication for *kshara sutra* therapy.

- Osteomyelitis
- Chronic/acute ulcerative colitis.
- Regional ileitis.
- Venereal diseases.
- Tuberculosis of hip joint.
- Tuberculosis of spine.
- Intra- abdominal cold abscess.
- Appendicitis.
- Crohn's disease.
- Intestinal and pelvic malignancies.
- Strictures of urethra causing urethral sinuses.

REFERENCES

1. Acharya Sushruta, Sushruta Samhita, Ayurveda- Tattva- Sandipika Hindi Commentary, Edited by Kaviraja Ambikadutta Shastri, Chaukhambha Sanskrit Saansthana, Varansi, Edition; Reprint 2016, Sutra Sthana - 11/03
2. Acharya Sushruta, Sushruta Samhita; Ayurveda - Tattva - Sandipika Hindi commentary; Edited by Kaviraja Ambikadutta Shastri; Chaukhambha Sanskrit Sansthan, Varanasi, Edition; Reprint 2008; Sutra Sthaana - 11/6, page no.34

3. Acharya Sushruta, Sushruta Samhita; Ayurveda - Tattva - Sandipika Hindi commentary; Edited by Kaviraja Ambikadutta Shastri; Chaukhambha Sanskrit Sansthan, Varanasi, Edition; Reprint 2008; Sutra Sthaana - 11/04
4. Acharya Sushruta, Sushruta Samhita; Ayurveda - Tattva - Sandipika Hindi commentary; Edited by Kaviraja Ambikadutta Shastri; Chaukhambha Sanskrit Sansthan, Varanasi, Edition; Reprint 2008; Sutra Sthaana - 11/18
5. Dr. M. Bhaskar Rao- Dissertation on 'Comparative clinical evaluation of Ksharasutra and Ksaralepa in the management of Bhahyarsa' submitted to the Bangalore University, Bangalore, 1989.
6. Recent Advances in Ksarasutra, Dr. Martha Bhaskar Rao, Dr G.S. Lavekar, Chaukhambha Publications, Publishers and Distributors of Oriental Cultral Literature, New Delhi, Edition First page no.1
7. Recent Advances in Ksarasutra, Dr. Martha Bhaskar Rao, Dr G.S. Lavekar, Chaukhambha Publications, Publishers and Distributors of Oriental Cultral Literature, New Delhi, Edition First page no.3
8. Kshara Sutra Therapy in Fistula-in-ano And Other Ano-Rectal Disorders, Dr. S.K.Sharma, Rashtriya Ayurved Vidyapeeth, 1st edition Chapter-6-page no. 60-61

CITATION OF THIS ARTICLE

Pallavi S, Sachin G, Saurabh S, Kainat A, Shruti S, Rachit G-Preparation of Snuhi Saptaparna Ksharsutra and Its Role in Surgical Practice. Bull. Env.Pharmacol. Life Sci., Vol 12 [12] November 2023: 450-454