



ISSN 2456-3110

Vol 9 · Issue 3

March 2024

Journal of
**Ayurveda and Integrated
Medical Sciences**

www.jaims.in

JAIMS

An International Journal for Researches in Ayurveda and Allied Sciences



Maharshi Charaka
Ayurveda

Indexed

A conceptual study on clinical application of *Pratisaraniya Kshara Karma*

Patel Vishva R¹, Duragappa H²

¹Post Graduate Scholar, Department of Shalyatantra, Government Ayurveda Medical College, Bangalore, Karnataka, India.

²Professor, Department of Shalyatantra, Government Ayurveda Medical College, Bangalore, Karnataka, India.

ABSTRACT

Ayurveda indeed delves deep into various therapeutic procedures, including *Shastrakarma* and *Anushtra Karma*. *Kshara*, considered one of the prime therapies, is classified into *Paneeeya* and *Pratisarneeeya*, with the latter further divided into *Mridu*, *Madhyama* and *Teekshana*.^[1] *Pratisaraniya Kshara* involves diverse applications like *Kshara* application, *Kshara Sutra*, *Kshara Varti*, *Kshara Plota*, *Kshara Taila* infiltration and intralesional injection of *Ksharodaka*. Its primary applications encompass treating conditions such as *Arsha* (hemorrhoids), *Bhagandara* (fistula-in-ano), *Nadivrana* (sinus), *Vidradhi* (abscess), *Dustavrana* (non healing ulcer) and *Charmakeela* (warts). In the *Sushruta Samhita*, *Acharya Sushruta* elaborates on *Kshara*'s multifaceted actions, attributing qualities like *Chedana* (cutting), *Bhedana* (penetrating), *Lekhana* (scraping), *Dahana* (caustic action), *Pachana* (digestive), *Darana* (breaking down), *Vilayana* (dissolving), *Sodhana* (purifying), *Ropana* (healing) and *Stambhana* (arresting).^[2] *Kshara*'s caustic nature plays a pivotal role in eliminating necrosed and infected tissues by inducing controlled tissue destruction.

Key words: *Anushastra*, *Pratisaraniya Kshara*, *Arsha*, *Bhagandara*, *Nadivrana*, *Dustavrana*, *Charmakeela*.

INTRODUCTION

Sushruta's delineation of *Kshara* is precise, focusing on its attributes of *Ksharana* (melting away) and *Kshanana* (destroying or mitigating morbid growth).^[3] Ayurvedic surgical procedures are elucidated through various means and tools, including *Shastra* (sharp-edged instruments), *Yantra* (blunt-edged instruments used in removing foreign bodies), and *Anushastra* (instruments applicable in the absence of *Shastra*).^[4] In

the context of *Anushastra*, *Kshara*, *Agni* (fire), and *Jalauka* (leeches) are extensively detailed in Ayurvedic texts. Each parasurgical procedure carries distinct indications and contraindications. *Kshara*, classified as *Paneeeya* and *Pratisarneeeya*, is further categorized into *Mridu*, *Madhyama*, and *Teekshana* types. *Teekshana Kshara* is employed in *Vataja*, *Kaphaja*, and *Medoja Arbuda*, while *Mridu Kshara* finds use in *Pittaja* and *Raktaja Arsha*.

Pratisarneeeya Kshara holds significance in treating various conditions such as *Kustha*, *Kitibha*, *Dadru*, *Mandala*, *Kilasa*, *Bhagandara*, *Arsha*, *Arbuda*, *Dusta Vrana*, *Nadi*, *Charmakeela*, *Tilakalaka*, *Nyaccha*, *Vyanga*, *Mashaka*, *Bahya Vidradhi*, *Krimi*, *Visha*, *Sapta Mukha Roga*.^[5]

The preparations and applications of *Kshara* is extensively documented in various classical Ayurvedic texts such as *Sushruta Samhita*, *Astanga Samgraha*, *Astanga Hridaya*, *Rasa Tarangini*, *Rasa Kamadhenu*, *Sharangdhara Samhita*, *Yogaratanakara*, and *Ayurveda Prakasha*. Notably, the use of *Kshara Sutra* in the treatment of *Nadivrana* and *Bhagandara* is

Address for correspondence:

Dr. Patel Vishva R

Post Graduate Scholar, Department of Shalyatantra,
Government Ayurveda Medical College, Bangalore, Karnataka,
India.

E-mail: vishvapatel6298@gmail.com

Submission Date: 15/01/2024 Accepted Date: 23/02/2024

Access this article online

Quick Response Code



Website: www.jaims.in

DOI: 10.21760/jaims.9.3.13

emphasized by both *Acharya Sushruta* and *Acharya Charaka*. These ancient texts serve as comprehensive guides, detailing the procedures, applications, and indications of various Ayurvedic treatments, offering a holistic approach to surgical and parasurgical interventions.

METHODOLOGY

Preparation of Pratisarneeeya Kshara

The preparation of *Pratisarneeeya Kshara*, typically follows the guidelines outlined in classical Ayurvedic texts. While the basic methodology remains consistent with ancient practices, some minor modifications might be incorporated in contemporary settings for various reasons, such as accessibility to certain ingredients, technological advancements, or standardization of procedures.

Preparation of Teekshna Apamarga Pratisaraniya Kshara

Ingredients and Materials

- *Apamarga Panchanga* - 10 kg
- Water - 6 liters
- *Shukti* (Conch shell ash) - 50 gm
- *Sudha* (Pure borax) - 50 gm
- *Citrakamoola Kalka* (Paste of *Plumbago zeylanica* root) - 10 gm

1. Collection and Burning of Apamarga Panchanga

- Collect 10 kg of *Apamarga Panchanga* and burn it into gray-colored ashes.

2. Ash Collection and Mixing with Water

- Collect 1 kg of ash and mix it with six times its volume of water (6 liters).
- Stir well and allow it to settle overnight.

3. Filtration

- Filter the mixture through double-folded cotton cloth for 21 times or until sedimentation or carbon particles are completely removed, retaining only the amber-colored filtrate.

4. Mandagni Paka and Addition of Mridu Kshara

- Subject the filtrate to *Mandagni Paka* until it reduces to 2/3rd of its volume.
- Introduce half of the required quantity of *Mridu Kshara* into the reduced mixture.

5. Addition of Shukti and Sudha

- Heat 50 gm each of *Shukti* and *Sudha* until red hot and mix them with *Ksharaudaka* (obtained from the reduced mixture) to dissolve completely.
- Filter this mixture and combine it with the prepared *Mridu Kshara* and the reduced filtrate.

6. Further Reduction and Addition of Citrakamoola Kalka

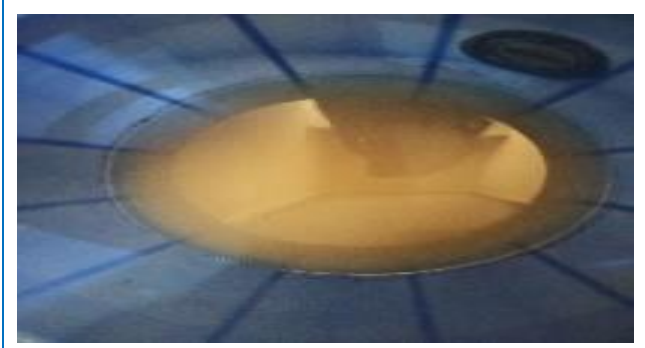
- Continue reducing the content until it reaches 2/3rd of its volume.
- Add 10 gm of *Citrakamoola Kalka* to the boiling *Ksharajala* and allow it to boil until the mixture achieves the desired consistency i.e., *Shlakshana Choorna*.

7. Storage

- Take the preparation off the heat and allow it to cool. Once cooled, transfer it to a separate airtight glass container with a lid for storage and future use.

This refined method of preparing *Kshara* from *Apamarga Panchanga* involves several steps to ensure the purification, concentration, and integration of the necessary elements to derive the therapeutic *Kshara* formulation.







1. Pratisaraniya apamarga kshara in Arshas (internal haemorrhoids)

Preoperative Procedure

- Explain the *Kshara* application procedure to the patient and obtain informed written consent.
- Prepare the patient for the procedure, including necessary hygiene and vital sign recording.
- Inj.T.T. 0.5ml IM
- Inj. Xylocaine 2% 0.5ml SC test dose
- Proctoclysis enema should be given and wait for complete evacuation of bowel

Operative Procedure

- Place the patient in the lithotomy position.
- Paint and drape the perianal area with antiseptic solution.

- Administer local anesthesia with Inj.xylocaine 2% and perform manual anal dilatation.
- Introduce a lubricated Proctoscope into the anal canal to visualize the hemorrhoids.
- Use a slit proctoscope to improve visibility around the hemorrhoids.
- Protect the anal mucosa with wet gauze piece to prevent accidental slippage of *Kshara* and apply *Apamarga Kshara* over the hemorrhoid.
- Close the proctoscope opening for a *shata matra kala*(90 second) using the palm.
- Wash the *Kshara* with *Jambeera Swarasa* followed by normal saline.
- Observe the color change of the hemorrhoids to bluish-black; repeat *Kshara* application if not attained *Pakwajambuvata* (bluish – black) colour.
- Remove the instruments and wet gauze piece, perform anal packing, dressing, and shift the patient to the ward.

Postoperative Procedure

- Remove the anal pack after 6 hours.
- Instruct the patient to take warm sitz baths twice daily after passing stool starting from the next day.
- Advise 20 ml *yastimadhu ghrita* infiltration for 7 days to aid in healing.





2. Pratisaraniya Apamarga Kshara in Nadivrana (pilonidal sinus)

Pre-operative procedure

- Explain the *Kshara* application procedure to the patient and obtain informed written consent.
- Prepare the patient for the procedure, including necessary hygiene and vital sign recording.
- Inj.T.T. 0.5ml IM
- Inj. Xylocaine 2% 0.5ml SC test dose

Operative procedure

- Administer local anesthesia with inj.xylocaine 2%
- Insert a copper probe along the sinus track , give a small nick and create an artificial opening at the distal / proximal end or secondary opening in case of pilonidal sinus.
- Excise the sinus track using a surgical blade no. 15.
- Remove any tuft of hair present in the area floowed by cleaning of excised area with antiseptic solution.
- Apply *Pratisaraniya Apamarga Kshara* to promote the sloughing off of dead tissue.
- Wash the treated area with *Jambeer Swarasa* (juice of citrus fruit) followed by normal saline.



Postoperative Procedure

- Pack the postoperative wound with *Jathyadi Taila*.
- Advised to take *Panchavalkala Kashaya* sitz baths for 20 minutes daily for 7 days.
- Perform alternate-day cleaning and dressing of the postoperative wound to ensure proper healing and prevent infection.

3. Pratisaraniya Apamarga Ksharakarma in Bhagandara

- In fistula in ano after fistulotomy *Kshara* is applied over open wound. It is kept till *Kshara Dagdha Lakshana* is observed as described earlier.
- Application of *Pratisaraneeya Kshara* in fistulotomy wound causes debridement of the fibrous tissue and at the same time remaining wound will be healed by the scraping and healing properties of *Kshara*.



4. Pratisaraniya Ksharakarma in Charmakeela

There is a precise method for applying *Teekshna Pratisaraniya Kshara* to treat pedunculated warts. When dealing with pedunculated or raised warts like *verruca vulgaris*, it's essential to apply these *Kshara* cautiously to avoid contact with healthy surrounding skin. Common warts (*verruca vulgaris*) often present as raised, flesh-colored papules with black dots (thrombosed capillaries), the application of *Kshara* might not result in an observable color change, as described in other cases. The color change, typically seen in other conditions like hemorrhoids or certain skin lesions, might not manifest due to the specific nature of *verruca vulgaris*.

- Cleaning the area with spirit/savlon solution.
- Covering unaffected skin with sterile gauze.
- Scraping the wart to soften it.
- Applying *Teekshna Apamarga Kshara* using a glass rod for a *Shatmatra Kala*
- Washing the area with *Jambeera Swarasa* followed by normal saline.
- Repeating the procedure for three sessions with an interval of seven days between each session or until the wart falls down.^[6]

5. Ksharakarma in Dustavrana

A. Teekshna Apamarga Pratisaraniya Ksharakarma

Dushtavrana (Chronic non-healing ulcers) are commonly encountered problem in the surgical practice and are major concern to the health care system. According to Acharya Sushruta, clinical features of *Dushta Vrana* are *Atisamvritta*, *Ativivritta*, *Atikathina*, *Atimridu*, *Utsanna*, *Avsanna*, *Atisheeta*, *Atiushna*, *Krishnaraktapeetashukladinaama*, *Bhairav*, *Putipuya*, *Mamsa*, *Sira-Snayu*, *Prabhritibhipurna*, *Putipuyasrava*, *Unmargi*, *Utsangi Amanogyadarshana*, *Gandhoatyartham*, *Vedanavaan*, *Dushtashonitsravi*, *Deerghakalanubandhi*. To achieve good approximation, early healing and acceptable scar without complications Acharya Sushruta has elaborately explained sixty types of procedures i.e., *Shashti Upakrama* in the management of *Dushta*

Varna. *Kshara Karma* is one among them. ulcers which are having features like elevated muscular growth, hard, itching, chronic and difficult to clean should be treated with *Kshara*. Presence of necrotic or devitalized tissue is commonly seen in chronic ulcers which delays wound healing.

Kshara possesses several qualities that make it beneficial in the management of *Dushta Vrana* (chronic ulcers) according to Ayurvedic principles:

1. Lekhana (Scraping): *Kshara* has the ability to scrape or remove unhealthy tissue from the ulcer, aiding in the process of debridement. It helps eliminate necrotic tissue and debris, facilitating a healthy granulation tissue over floor of ulcer for healing.

2. Shodhana (Cleansing/Purification): This property allows *Kshara* to cleanse the ulcer thoroughly. It helps in reducing microbial load, promoting a more sterile environment for healing and preventing infections.

3. Ropana (Healing): Despite its debriding properties, *Kshara* also aids in healing. Once debridement is done, it supports the regeneration of healthy tissue, promoting the closure of the wound and minimizing scarring.



The multi-faceted nature of *Kshara* makes it a versatile tool in managing chronic and non-healing ulcer. Its ability to both debride and promote healing

contributes significantly to the process of wound management.

B. Kshara Taila Infiltration in Dustavrana

Apamarga kshara taila prepared from kshara along with kshara jala have been reported having favorable physiochemical parameters including alkaline pH (7.5), least acid value (0.3559), and high saponification value (226.84).^[7]

C. Kshara Varti / Kshara Plota in Dusta Vrana

Application of Varti in management of Vrana is well known and Sushruta has mentioned it *Shastiupkrama* in *Dwivaranachikitsaadhya*. *Kshar Varti Chikitsa* in *Vrana* is used for the *Shodhana* and *Ropana* as *Kshar* is also one variety of cauterization by using phytochemical substance.

Preparation of Kshara Varti

Kshara Varti prepared by using *Apamarga Kshara*, *Snuhi Kshira*, *Haridra Churna*, mixed in such way mixture PH is in range of 8 to 8.5. in this mixture gauze piece soaked and dried in *Kshar Sutra* cabin under septic precaution then *Kshar Varti* are sterilized by UV rays and stored in glass container which is sterile.^[8]

Preparation of Kshara Plota

The gauze piece of size used is 23cm in diameter, which is fixed in the double layered circular wooden ring. Gauze piece is made so tight that the coating is made uniformly. Initially on 1st day *Snuhikshira* was applied over the gauze on its whole circumference with the help of small cotton swab, hands should be gloved before smearing. The wet coated gauze with rings should be placed inside cabinet and it is dried for a day. On the 2nd day, dried gauze was again smeared with *Snuhikshira* followed by *Apamargakshara* with cotton swab; let it dry in a cabinet for a day. On the 3rd day, dried gauze was smeared with *Snuhikshira* followed by *Haridra* powder; let it dry for a day in cabinet. In this way a single coating of each *Snuhikshira*, *Apamargakshara* and *Haridra* powder are completed and sealed in polythene packs. *Ksharaplotas* should be placed in cabinet for safety storage as well as for sterilization.^[9]

Application of Ksharavarti / Ksharaplotas in Dusta Vrana:

Wash the wound with normal saline then keep specially prepared *Kshara Varti / Kshara Plota* in place of slough containing wound. A dry gauze placed on it and dressing done. keep *Varti* for 24 hr. This same procedure should be repeated everyday till the slough disappears.^[9]

DISCUSSION

Kshara as described by *Sushruta Acharya*, holds a prominent place in *Shalya Tantra* due to its diverse and potent qualities like *Pachana*, *Vilayana*, *Chedana*, *Tridoshaghna*, *Bhedana*, *Lekhna*, *Sodhana*, *Ropana*, *Stambhana*; destroys *Krimi*, *Ama*, *Kapha*, *Kusta*, *Visha* and *Meda*.^[2] *Kshara*, made from a combination of drugs, possesses *Tridosha Shamaka* properties, indicating its balancing effect on the three doshas according to Ayurveda. *Pratisaraniya Ksharakarma*, the application of *Kshara* to *Arshas* (hemorrhoids) induces coagulation of 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 slough 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 seen. The haemorrhoidal vein obliterates permanently and there is no recurrence of haemorrhoids. While severe adverse effects are rare, minor effects such as burning sensations and sphincter spasms might occur post-operative. These can be managed by administering oils like *Madhuyasti Taila* or *Jatyadi Taila*. This treatment doesn't typically result in anal stricture, but precautions during the procedure are recommended, such as performing Manual anal dilation and ensuring precise application only on the haemorrhoidal mass without affecting the normal anal mucosa. The correct potency of *Pratisaraneeya Kshara* is assessed by observing the change in color (*Jambuphalavarna*) of the haemorrhoidal mass within a *Shatamatra Kala*.

In conditions like fistula in ano and pilonidal sinus application of *Kshara* can not only target post op fistulotomy wound but also extend into secondary tracts that might not have been addressed directly during fistulotomy of primary tract. *Kshara* helps minimize the chances of recurrence by eliminating hidden or untreated ramification that could potentially cause reinfection.

Sushruta Acharya mentioned *Kshara* in the context of *Shastiupakarma* (sixty therapeutic measures) for *Vrana* (wounds) highlights its role in wound management. *Kshara's* specific properties - *Lekhana* (scraping), *Sodhana* (purification), and *Ropana* (healing) contribute significantly to the process of wound healing and desloughing. This efficiency is achieved by strictly adhering to the technique of *Kshara* preparation.

CONCLUSION

Kshara is the best among *Shastra* and *Anushastra*. *Kshara* is also one of the *Shashti Upakrama* mentioned for wound management by *Acharya Sushruta* because of its properties, it is having excellent result in case of internal haemorrhoids, fistula in ano, pilonidal sinus, warts and in wound management.

ACKNOWLEDGMENT

The authors express their gratitude to all the faculty members in the Department of Shalya Tantra at Government Ayurvedic Medical College, Bengaluru, for their valuable guidance and unwavering support.

REFERENCES

1. Kaviraj Ambikadatta shastri, Sushruta Samhita of Maharshi Sushruta with Ayurveda tatsandeeepika hindi commentary, volume 1, Sutra Sthana, 11th chapter, sl no 11, Chaukhambha Sanskrit Sansthana, Varanasi, 2018, p.47.
2. Kaviraj Ambikadatta shastri, Sushruta Samhita of Maharshi Sushruta with Ayurveda tatsandeeepika hindi commentary, volume 1, Sutra Sthana, 11th chapter, sl no 5, Chaukhambha Sanskrit Sansthana, Varanasi, 2018, p.47.
3. Kaviraj Ambikadatta shastri, Sushruta Samhita of Maharshi Sushruta with Ayurveda tatsandeeepika hindi commentary, volume 1, Sutra Sthana, 11th chapter, sl no 4, Chaukhambha Sanskrit Sansthana, Varanasi, 2018, p.47.
4. Kaviraj Ambikadatta shastri, Sushruta Samhita of Maharshi Sushruta with Ayurveda tatsandeeepika hindi commentary, volume 1, Sutra Sthana, 11th chapter, sl no 3, Chaukhambha Sanskrit Sansthana, Varanasi, 2018, p.47.
5. Kaviraj Ambikadatta shastri, Sushruta Samhita of Maharshi Sushruta with Ayurveda tatsandeeepika hindi commentary, volume 1, Sutra Sthana, 11th chapter, sl no 7, Chaukhambha Sanskrit Sansthana, Varanasi, 2018, p.47.
6. Shinde P, Kiran M. Carmakila: An effective management by kshara karma. J Ayurveda Integr Med. 2013 Jul;4(3):181-3. doi: 10.4103/0975-9476.118711. PMID: 24250149; PMCID: PMC3821194.
7. Joshi, Foram; Dudhamal, Tukaram S.. Tissue Debridement Effect of Apamarga Kshara Taila and Adjuvant Medications in the Management of Nonhealing Venous Ulcer: A Case Series. Medical Journal of Dr. D.Y. Patil Vidyapeeth 14(5):p 549-553, Sep–Oct 2021. | DOI: 10.4103/mjdrdypu.mjdrdypu_52_20
8. Use of kshar varti in de-sloughing of wound Vilas Kedar, Vidya Dharne Ayurlog: National Journal of Research in Ayurved Science- 2018; (6)(4): 1-6
9. Anantkumar V. Shekokar, Kanchan M. Borkar. Innovation of Ksharaplot (medicated gauze) in the Management of Vrana (Ulcer). Int. J. Ayur. Pharma Research 2013; 1 (2): 10-16

How to cite this article: Patel Vishva R, Duragappa H. A conceptual study on clinical application of Pratisaraniya Kshara Karma. J Ayurveda Integr Med Sci 2024;3:94-101. <http://dx.doi.org/10.21760/jaims.9.3.13>

Source of Support: Nil, **Conflict of Interest:** None declared.
