A conceptual study on clinical application of Pratisaraniya Kshara Karma

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ABSTRACT

Ayurveda indeed delves deep into various therapeutic procedures, including Shastrakarma and Anushstra Karma. Kshara, considered one of the prime therapies, is classified into Paneeya and Pratisarneeya, with the latter further divided into Mridu, Madhyama and Teekshana. 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). Kshara’s caustic nature plays a pivotal role in eliminating necrotic 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). 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).

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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.

**METHODODOGY**

**Preparation of Pratisarneeya Kshara**

The preparation of Pratisarneeya 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 Kalika**

   - Continue reducing the content until it reaches 2/3rd of its volume.
   - Add 10 gm of Citrakamoola Kalika 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 fowed by cleaning of excised area with anticeptic 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.

a) Cleaning the area with spirit/savlon solution.

b) Covering unaffected skin with sterile gauze.

c) Scraping the wart to soften it.

d) Applying Teekshna Apamarga Kshara using a glass rod for a Shatmatra Kala

e) Washing the area with Jambeera Swarasa followed by normal saline.

f) 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 Dusavarna

A. Teekshna Apamarga Pratisaraniya Ksharakarma

Dusvatrans (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, Krishnaraktapeetashukladina, Bhairav, Putipuya, Mamsa, Sira-Snayu Prabhritibhipurna, Putipuyasrava, Unmargi, Utsangi Amanogaradha, Gandhooatyartham, Vedanaavan, Dushtasenitisravi, Deergahalanubandhi. 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 Dwivararanachitsaadhya. Kshar Varti Chikitsa in Vrana is used for the Shodhana and Ropana as Kshar is also one Varity 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 rage 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 bt 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 Snuhi Kshira 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 Snuhi Kshira followed by Apamargakshara with cotton swab; let it dry in a cabinet for a day. On the 3rd day, dried gauze was smeared with Snuhi Kshira followed by Haridra powder; let it dry for a day in cabinet.In this way a single coating of each Snuhi Kshira, Apamargakshara and Haridra powder are completed and sealed in polythene packs. Ksharaplota should be placed in cabinet for safety storage as well as for sterilization.[9]

Application of Ksharavarti / Ksharaplota 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, Tridoshaghnana, Bhedana, Lekhana, 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 (Jambupalavarna) of the haemorrhoidal mass within a Shatatmatra 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.

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REFERENCES


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