A CRITICAL REVIEW OF USE OF KSHARA IN SURGICAL PRACTICES

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ABSTRACT
Kshara kalpana is one of the important dosage form developed as sub type of Panchavidh kashay Kalpana. Kshara is alkaline in nature. It is first described in Sushrut samhita. There are various methods described in ayurvedic texts for the preparation of kshara. It has been proved to be effective medicine internally as well as externally. Internally it can be used by means of Vati (tablets), churna (powdered form) or as a liquid like Ksharodaka. While externally it is used as lepa or pratisarana. It’s one of the modification of external use is Ksharasutra which is described by Acharya Chakradatta. It is being used widely by surgeons and appreciated its effectiveness. Kshara is considered superior to all the shastra karma (surgical measures) and anu-shastra karma (para-surgical measures), because Ksharas perform the work of shodhan, bhedan, lekhana, pachana, ropan, stambhana karma i.e. incision, puncture, and scarification etc. so as to relieve the derangements of Tridosha. They uniformly affect the diseased part or parts to which they are applied. There is wide range of description available about kshara kalpana in ayurvedic texts. Based on raw material used for kshara formation and mode of use, it has two main types pratisaraniya kshara and paniya kshara which are widely used in surgical practices as main parasurgical process.

KEYWORDS: Kshara kalpana, paniya kshara, pratisarniya kshara, para-surgical process.

INTRODUCTION
Ayurveda is the ancient science which aims the better health of the individual. Person is healthy only when he is free from both physical and psychological pain. In ayurveda physical pain is consider as shalya.
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अतिप्रवृद्ध मलदोषजं वा शरीरिणां स्थावरज्ञमानामं
यत्कचिनिदाबाधकरं शरीरे तत् सर्वेखं प्रवदन्ति शल्यम्'’ - इति [1] (सु.सू.१/८ डल्हण टिका)

Which means, any internal or external factors like prakopa of dosha or dusthi of mala or
Any other external plant and animal origin substances which causes pain or harm to the body
it is known as shalya.

तत्, शल्यं नाम विविधतृणांकाष्ठपाणपांशुलोहलोह्याधिकालन्यितृखपूयावदुष्टवरणांतर्ग्रह्यः-
शल्योद्दल्यपाधी, यन्त्रश्लोकार्यनिप्रणधाणविविधयाय च [2] (सु.सू.१/८(९))

Shalyatantra is one of the branch of ayurveda which deals with removing of any unwanted
substance from the body which is responsible for causing physical pain with the help of
yantra (blunt instruments used to guide), shastra (sharp instruments that can causes harm),
kshara and agni also it mainly deals with the wounds. Definition itself suggest the importance
of kshara karma in the surgical practice. Acharya sushruta include kshara in both upyantra
and anushastra.[3]

शस्त्रानुशस्त्रेभ्म् क्षारः प्रधानतमः, छेद्येवेद्येवेद्येकरणात् त्रिदोषघनत्वद्विशेषक्रियावचाराचारच्च [4]
(सु.सू.१९/३)

Kshara kalpana is consider as more potent rather than any shastra or anushastra. This is
because of its qualities like chedan, bhedan, lekhan etc. Also it can act on any dosha
depending upon the plant use for making of kshara, which gives it characteristics of
tridoshashguna. It can be use internally as well as externally. And we can use kshara where it is
not possible to use any other surgical instruments. Hence, it is consider superior than shastra
and anushastra.

Many of the surgical disorders are the result of manifestation cause by avrodhatmak
samprapti. While rakta and mansa are being the main dushyas, kshara is main line of
treatment in the dushti of mansa vaha strotas.[5] Where in some cases it can be used in raktaj
vikara also.

Today’s lifestyle is itself responsible for many surgical problems like arsha (hemorrhoids),
bhagandara (Fistula), Parikartika (Fissure), vidradhi (abcess), arbuda (malignant growth),
granthi (tumour), gulma (any glandular growth in the abdomen), charmakila (mole), sharkara
(small fragments of stone), ashmari (stones) etc. Hence here attempt is made to review the use of kshara in surgical practices.

**AIM**

To study the use of kshara in surgical practices.

**OBJECTIVES**

- To study the concept of kshara comprehensively from ayurvedic texts.
- To study the use of kshara in surgical conditions as parasurgical process.

**MATERIAL AND METHODS**

This is conceptual type of study. All sorts of references related to kshara kalpana has been collected and compiled from various available classics text of Ayurveda like Charak samhita, Sushruta samhita and Ashtanga-hrudaya with available commentaries. Literature available regarding kshara kalpana from various journals and books were collected. All matter is analyzed and attempt has been made to draw some fruitful conclusions about its properties, indications, contraindications, doses and post application management in various surgical conditions.

**Review literature**

**Kshara NIRUKTI**

तत्र क्षरणात् क्षणनाद्वा क्षारः || [6] (सू ११/४)

The substance which causes ‘ksharana’ i.e. loosening and removal of dustha twak mansadi dhatus is known as Kshara.

**Properties of Kshara**

नानौषधधसभवामात्कत्रदोषघ्न्, शुक्लत्वात् सौम्यः; तस्य सौम्यस्याचि सतो दहनपचनदाराणादिशविश्वक्तिरविरूद्धा, आच्छेयोषधिगुणाभृत्यिच्चत्वात् कटुक उष्णत्स्तीक्षणः पाचनो विलयनः शौधनो रोपणः शोषणः; स्तम्भनो लेखनः कृत्ताकक्षकष्टविशेषज्ञामपानलता पुष्ट्यस्य चालिसेवितः || [7] (सू ११/५)

Kshara can act on any dosha depending upon the plant use for making kshara which gives it characteristics of tridoshghantva. White colour indicates it is mild or bland. But though it is mid in action it has potency to burn, to digest or to soften something, capacity to splitting or tearing something. Mostly kshara is formed by ushna (hot) dravyas which gives it characteristics of katu (spicy) in taste, hot, sharp, digestive or softening property, cleaning
nature, healing property, drying, arresting and scraping property. It decreases the krumi (maggots), ama, kapha, kushtha (skin diseases), visha (poisoning symptoms) and meda. But if it is used in excess it causes infertility. This all properties make to reduce the avrodhatmak samprapti of dosha which is the main cause of surgical conditions.

**Types of Kshara**

There are two types according to its direction of use

- Paniya (Internally use)
- Pratisarniya (Externally use)[8]

Paniya kshara is always mrudu (mild) in nature whereas according to potency Pratisarniya kshara has three types –

- Mrudu kshara / Aprativapa Kshara (Mild in action)
- Madhyama Kshara (intermediate in action)
- Tishana Kshara/ Saprativap kshara (sharp in action)[9]

**Indication for use of kshara**

Indication for Pratisarniya Kshara

Surgical indication of pratisarniya kshara includes bhagandara (Fistula in ano), arbuda (malignant growth), arsha (hemorrhoids), dushta vrana (infected wound), nadivrana (ulcer), charmakeel (warts), bahya vidradhi (external abscess), bahya krumi (maggot infection) etc.

**Indication for Paniya Kshara**

Surgical indication of paniya kshara includes gulma (any glandular growth in the abdomen), udara (ascites due to obstruction), sharkara (small fragments of stone), ashmari (stones), abhyantara vidradhi (internal abscess), krumi (maggot infection) etc.

In both above cases if rugnabala is ksheena i.e. if patient is weak then ksharodaka is used.[12]
Contraindications to use of kshara

Use of any of the kshara is contraindicated if person is suffering from raktapitta (bleeding disorder), jwara(fever), bhrama(giddiness), mada(drunkness), murcha (fainting), timira (lens-opacities), pitta prakriti individual, children, older & weaker person, inflammatory conditions, ascites, pregnant woman, menstruating woman, infertility, etc.\[^{13}\]

Body parts where kshara application is contraindicated

Application of kshara is contraindicated at marma pradesh, veins, arteries, nerves, tendons, joints, cartilages, sutures or seam life union of body parts, gala, naval region, nakhanta (near nail bed), penis- scrotal region, less muscle density regions like forehead and ophthalmic conditions except diseases of eyelid.

Mostly contraindication of pratisarniya kshara is expected here.

Special contraindicated conditions

Even in the conditions where use of kshara is indicated, if patient is suffering from the symptoms like inflammation, pain in bones, anorexia, pain in heart or in joints then the patient should be considered contraindicated for the application of kshara.

Dose

Paniya kshara matra-

- Uttam matra - 4 Tole (40 ml)
- Madhyam matra – 3 Tole (30 ml)
- Hina matra- 2 Tole (20 ml)\[^{16}\]
Things to be done before application of kshara

Before applying kshara to any place disturbance of dosha constituents should be taken into consideration. If it is cause by dushita pitta then it must rub previously, in case of vata dushti with numb and stiff skin it should be scrap before, whereas in case of kapha dusthi with abundant itching and swelling pracch an karma should be done. These things should be done just before application of kshara, so that it can perform its action very well.

Duration of application

It should be apply for 100 ‘matra’ (nearly 1.5 minutes) except in the place delicate organs like nose and ear where it should be applied for 50 ‘matra’

Samyak Dagdha lakshana

Perfect application of kshara gives signs such as blackening of that area, stoppage of discharge if any. Also it produces lightness in that area along with relief from the disease.

Pschat karama

After getting samyak lakshanas, to decrease it action, dravya which are sour in taste should be used to wash that particular part. It is because the symptoms such as burning sensation are lower by the cold nature of sour dravyas. And after that Tila kalka (paste), Yashtimadhu churna are applied with ghee for wound healing.

Acharya Vagbhata added the use of abhishyandi ahar after performing kshara karma for the healing of wound by its kledan karma.

Use of kshara in various surgical conditions

Use of kshara in Vrana

Shasthi upakarama of vrana consist of daran karama and kshara karama. Daran karma (tearing or splitting of wound) is done with the help of kshara. Kshara karama is used in wound treatment as clearing agent.
In case if muscular growth is occur in wound or if wound is stiff, with itching and chronic in nature then kshara is use as clearing agent.

**Use of kshara in Nadi Vrana**

Kṛṣṇaṁkṛṣṇāṁ nāḍī māṁkṛṣṇē tā yā |
Kāśārasūtraṁ taṁ cīchānḍāyānāṁ tu śāstrēṇ tu būḍhīmaṇāṁ ||

If patient is weak and vrana is occur at the marma pradesha then instead of using surgical procedure ksharasutras can be used to cut the nadivrana. Assessing its track by probing and application of ksharasutra through it will help to cut the track and so the nadivrana.

**Use of kshara in Bhagandara (Fistula in ano)** –

Bhagandarāmuḥkamāsāduṣṭāṇiṁ daṭṭha saṃhaṅateḥ; Aśāvyād vāṣaṁ kṣāraṁ chaṭṭheḥ; Aṣṭaṅga saṁmānya sarvasṣu||

General guideline of the fissure treatment in ayurveda includes that in case of both bahya and abhyantara mukha bhagandara. As it is a fistula, probing through the track and cutting of the track should be done in guidance with probing. Then Agni karma and Kshara karma is carried out. Even if by chance surgical procedure is unable to perform at that place kshara karma should be done.

**Use of kshara in Arsha (hemorrhoids)**

Chandaḥkṣeṣaṁ saādhanopayāḥ |
Tadāyaḥ- kṣeṣṭaṁ kṣāraṁ bhātāḥ; saṅkṣāmaṁtiḥ |
Mūḍhāmuḥkāmadhvāgadhānāyaḥ śāstrēṇaḥ...||

Arsha (hemorrhoids) can be treated by four means medicines, agni karma and kshara karma (para surgical procedures) and shastra (surgical procedures). Among them, hemorrhoids which are smooth, stretched or wide spreading, deep routed and lifted up should be treated with kshara.
According to dosha constituents, Vata-kapahaj arsha treated by using both agni and kshara, but pitta-raktaj arsha being soft in nature should be treated by using kshara alone.

Use of kshara matra in arsha chikitsa.

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Use of kshara in Vidradhi (Abscess)

Acharya Vagbhata mentined that in case of pakva vidradhi vranavat chikitsa should be done which includes kshara karma. Also, in case of aam vidradhi Vranashophavat chikitsa is done in which kshara can be used for vimlapana (softening) and patana (cutting) karma.

Use of kshara in Sharkara and Ashmari

According to Acharya sushruta the kshara formed by medicinal plants namely Tila, Apamarga, Kadali, Palash and Yava is taken along with avimutra then it penetrates the stones and splitting it into fine structures which help to pass it down through urinary tract. Also use of kshara of particular doshghna dravya is useful in treatment of stone.

CONCLUSION

Since ancient time kshara is used for treating variety of diseases. Even though it is ancient therapy it is so much effective in current era also. Kshara kalpana can be used both internally as well as externally, which helps for its widespread action. Though main action of kshara is puncture, scarification or as clearing agent sometime it also helps for healing, stoppage of discharge occurs if it is applied properly. As kshara can be formed by any medicinal plant or
minerals, their combination is responsible for its action on doshas, which makes it tridoshaghnatva.

Kshara karma is the main line of treatment in diseases related to mansa vaha strotas which is main dushya in surgical diseases. Also its pachana, lekhana, chedana, bhedana actions helps to decrease the surgical conditions as it is mainly caused by avrodhatmak samprapti. Kshara can be used where surgical procedures cannot be done hence, it is considered superior to all the shastra karma (surgical measures) and anu-shastra karma (para-surgical measures). Hence, from the above references we can conclude that kshara kalpana is very effective and widely used as parasurgical procedure in surgical practices.

REFERENCES
