

## **ROLE OF APAMARGKSHARAVARTI IN THE MANAGEMENT OF MANDIBULAR SINUS – A CASE STUDY**

**Hemant K. Kubavat<sup>1</sup>, Harshit S. Shah<sup>2</sup>, Malakiya Chintankumar.G<sup>3</sup>, Namrata G. sojitra<sup>4</sup>**

<sup>1,4</sup>Final Year PG Scholar, <sup>2</sup>Associate professor,

Department of Shalya Tantra, Government Akhandanad Ayurveda Mahavidhyalaya, Ahmedabad-380001, Gujarat, India

<sup>3</sup>PG Scholar, Department of Roganidana and Vikruti Vijnana, Sri Dharmasthala Manjunatheshwara College of Ayurveda & Hospital Hassan - 573 201, Karnataka, India.

**Email:** [hkkubavat@gmail.com](mailto:hkkubavat@gmail.com)

### ABSTRACT

*Kshara* refers to corrosive or causative. *Kshara* is considered superior to all surgical and para surgical measures because they perform the work of incision, puncture and scarification to relieve derangements of *Tridosha* and uniformly affect the diseased part to which they are applied. *Kshara* possess qualities like *Tridoshaghna*, *Saumyata*, *Dahana*, *Pachana*, *Ropana*, *Darana*, *Katuka*, *Ushna*, *Tikshna*, *Vilayan*, *Shodhana*, *Ropana*, *Shoshana*, *Stambhana*, *Lekhana*, *Krimighna*. *Vartikalpana* is among *Shasti Upkrama* of the *Vrana Chikitsa* and specially indicated in the *Samanya Chikitsa* of *nadi vrana*. These are meant for local application and thus help in expelling the accumulated *dosha* from the applied area. *Nadi vrana* is explained by *Acharya Sushruta* in *Nidanasthana* and *Chikitsasthanana*. *Nadivrana* is of eight types. This disease manifest itself as a blind tract leading down to the tissue ending blind internally and discharging seropurulent material associated with severe pain. Sinus is a blind tract leading from the surface down to the tissue. It is lined by granulation tissue which may be epithelialied. A sinus can occurs anywhere in the body. On the basis of sign and symptoms mandibular sinus can be correlated with *Nadivrana*.

**Keywords:** *Apamargaksharavarti*, *Nadivrana*, Mandibular sinus

### INTRODUCTION

According to *shabdakalpadruma* the word *kshara* is derived from the root *kshara* means to melt away or to perish. *Kshara* means which destroys or cleans the devitalized tissue

and to disintegrate the skin or other tissue. *Acharya Sushruta* mentioned *kshara* in the treatment of *Nadi Vrana*, *Arbuda*, *Bhagandara* etc.<sup>1</sup> *Kshara* is considered superior to all sur-

gical and para surgical measures because they perform the work of incision, puncture and scarification to relieve derangements of *trido-sha* and uniformly affect the diseased part to which they are applied<sup>2</sup>. Description of *Kshara* has been mentioned in post-Vedic literature. *Charaka Samhita* only refers to *Kshara*, the detailed description of its preparation, classification, indication and contraindication are describe by *Acharya Sushruta* in *Sushruta Samhita*<sup>3</sup>. *Kshara* is described as one among the *Anusastras*<sup>4</sup> and *Upayantras*<sup>5</sup>. The word "*Kshara*" has different derivations. *Kshara* means 'Shatana' or destruction. It destroys unhealthy tissues. Derivation from *Ksharanam* means violence i.e. violence on unhealthy tissues. *Acharya Sushruta* has defined "*TatraKsharanatKshananadva Kshara*". The drug which has the characteristics of *Kshanan* or *Ksharan* literally means that which destroys fleshy mass either healthy or unhealthy. According to *Acharya Charaka Kshara* means which scrapes the abnormal tissue from its location and destroys it after dissolving it, because of its corrosive nature, classification of *Kshara* can be done by the origin of *Kshara* is of herbal, mineral and animal. *Apamarga* is acrid, bitter, thermogenic, expectorant, revulsive, carminative, depurative, antihelminthic and anti-inflammatory. It is used in painful inflammation, leprosy, dropsy, skin diseases, piles, boils, pruritis, and helminthiasis. *Apamarga* is having *Katu*, *Tikta rasa*, *Laghu*, *Ruksha*, *Teekshnaguna* and *ushnaveerya* and *katu vipaka*. It is also *Kaphavathashamaka*, *Kaphapittasamshodhaka*, useful in *Vrana*, *Shoola*, *Arsha*, *Krimi*, *Raktavikara*, *Shota*, *Kusta*, *Charmaroga*<sup>6</sup>. In this present case

study, *Nadi Vrana* or *Aganthuja Nadi Vrana* is taken. In the contemporary sciences, there are several methods to treat sinus (*Nadi Vrana*) but the recurrence rate is more, in this regard *Acharya Sushruta* has given elaborative description regarding treatment of *Nadi Vrana* that is *Nirharana* of *shalya* followed by *Margashodhana* and *Ropana*. In the indication of *kshara Acharya Sushruta* has included *Nadi Vrana*.

### **Mandibular sinus:**

It is chronic infective acquired condition where in there is infection of roots of one or both lower incisor teeth forming root abscess which eventually tracks down between two halves of lower jaw in the midline presenting as discharging sinus on the point of chin at midline. Usually it is painless discharging sinus, often incisor infection may be revealed. osteomyelitis of mandible is possible complication due to this.<sup>7</sup>

### **Case report:**

Name of Patient -xyz  
OPD no. -14456  
Age - 15 years  
Gender - Male  
Nationality - Indian  
State - Gujrat  
District - Kheda  
Appearance - thin & tall  
Occupation - student  
Socio-economic status - middle class

### **Chief complaints:**

Non-healing wound at chin region since 6 months  
Watery and yellowish pus discharge from wound – on & off

Pain at the site of the wound – on & off

Fever - sometimes

**Past history:**

No relevant history contributing to the current condition of the patient.

No history of Diabetes mellitus / Hypertension / Bronchial Asthma / Any major illness / Any Surgery

**On examination:**

Inspection: There is an external opening at the lower part of chin

Pus discharge: watery and yellowish pus discharge from the wound

Palpation: Pain and tenderness at chin region

Probing: 2 cm track found, internal opening not seen

Figure 1



**Observation for the present case:**

Sign and Symptoms	Before Treatment	After Treatment	% Relief
Pain	+++	No pain	100%
Length of track with external opening	2 cm	Track is healed external opening closed	100%
Pus discharge (watery and yellowish)	++	No discharge	100%
Tenderness	++	No tenderness	100%

**Diagnosis:**

As per contemporary science it was pre-diagnosed as a mandibular sinus. As per Ayurveda classical text it can be co-related with Nadivrana.

**Vartichikitsha:**

Duration of treatment: 45 days including follow up.

*Prakshalan karma:* with *PanchvalakalKwath* (alternate day)

*Vartiupkarma:* by *Apamargksharvarti* (*apamargkshar +vat ksheer+swarjidakshar* (as binding agents)-(alternate day)

**Oral medication:** *Triphlaguglu* (1 tds, 500 mg) everyday with *shukoushnajala* as *Anupana*

Figure 2



**Panchvalkalakwatha:** *PanchavalkalaKvatha* is a simple preparation. The ingredients are *Vata* (*Ficus bengalensis* Linn.), *Udumbara* (*Ficus glomerata* Roxb.), *Ashvatha* (*Ficus religiosa* Linn.), *Parisha* (*Thespesia populnea* Soland ex Correa) and *Plaksha* (*Ficus infectoria* Roxb.) These are available throughout India.<sup>8</sup> The dried bark of the drugs *Vata*, *Udumbara*, *Ashvatha*, *Parisha*, *Plaksha* are taken in equal quantity. They are pounded and *Kwatha-Choorna* (coarse powder) is prepared. For 50 gm. *KwathaChoorna* 800 ml of water (1:16) is added. Then they are boiled on a mild fire until it becomes 1/4<sup>th</sup> of its original quantity. Then it is removed from the fire and filter.

## DISCUSSION

*Nadi Vrana* is one of the troublesome diseases that are encountered in day today surgical practice that do not respond to the medical treatment at all, except surgical intervention. Even this surgical management is also not completely curative due to the recurrence rate is high. *Nadi Vrana* is compared with mandibular sinus.

The causative factors (*Nidana*) of *Nadi Vrana* are when a *Vaidya* neglects the matured *Vrana Shopha* as immature one without doing the *Sastra Karma*. The pus which is accumulated

in a *vrana* if it is not drained properly leads to the formation of *Nadi Vran*. *Kshara* used externally it has cleansing, heating, absorbent, and scraping. All these properties help in curing the wound.

**Probable mode of action of *Kshara*:** After application on *Nadi Vrana* it coagulates the protein intern does the necrosis of the tissue with obliteration of slough hence rate of recurrence is negligible.

In *apamarga* presence of Chemical constituents like alkaloids, glycosides, saponins etc are active principles of the plant responsible for therapeutic action. Saponin extract are inhibitory to the growth of the gram positive bacteria<sup>9</sup> and alkaloids displays good antimicrobial activity against test microorganism<sup>10</sup>. *Apamarga* having pharmacological activities like antimicrobial, antibiotic, antifungal, anti-implantation, purgative, vasodilator which are useful for the killing the micro bacteria of the wound and heals the wound<sup>11</sup>. *Karma* of *apamargakshara* is *Shothahara, Vedanastapana, Lekhana, Vishagna, Deepana, Pachana, Pitta-saraka, Raktavardaka, Kaphanisaraka, Kustagna, Kandugna*<sup>12</sup>

As per *Acharya Sushruta*, *kshara* is having qualities like *Tridoshaghna* – because of different type of chemical constitutions they can

pacify all the humours, *Saumyata* - owing to their white colour. *Dahana*-owing to its burning nature, *Pachana* because of its digestive capability, *Darana* – since drug of *agneya* nature, *katuka* -due to its pungent taste, *Ushna*-because of heat producing nature, *Tikshna*-due to its irritant nature, *Vilayan*- because of its liquefaction properties, *Shodhana*-because of its cleansing properties, *Ropana*- improve healing (granulation), *Shoshana*-absorption, *Lekhna*- scraping properties, *Krimighna* –due to its antimicrobial properties. It normalizes *ama*, *kapha*, *visha*, *medadhātu*<sup>13</sup>.

**Mode of action of Varti:** To establish the probable mode of action of *ksharvarti*, various clinical trials and studies have been carried out. *Kshara* creates strangulation of blood vessels and tissue which causes the necrosis of the body of any swelling. *Kshara* invades into the cells of lesion till engorged tissue destruction occurs by its *ksharanaguna*. *Vatakshira* is being proteolytic in nature; dissolve the tissue at its base.

## CONCLUSION

Wound healing process is a normal phenomenon starts right from the surgery and continues in sequential manner till the formation of healing scar. The application of *Ksharavarti* helped after the excision by: *Lekhana* of pits in the surrounding tissue of the sinus, Avoids the formation of unhealthy granulation tissue and Helps in healing of the wound from the base. It starts reducing complaints of patient within 10 days. Wound at the chin region completely healed within 25 days and the complaints of pain, pus discharge, tenderness reduced gradually. No any adverse effect

noted during treatment and patients having relief due to *Ayurvedic* medicine and effect of *ksharavarti* as *chhedan*, *bhedana* and *lekhana* property.pt. Advised for regular follow up to know whether effect of treatment is temporary or permanent. All medicines and treatment and dressing stopped after complete healing of the wound.

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