

CLINICAL EFFICACY OF KSHARAVARTI PRAYOGA IN NADI VRANA WITH REFERENCE TO PRE-AURICULAR SINUS – A CASE STUDY

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ABSTRACT

Preauricular sinus, also known as a congenital auricular fistula, a congenital preauricular fistula, an ear pit or a preauricular cyst is a common congenital malformation characterized by a nodule; dent or dimple located anywhere adjacent to the external ear. They are inherited features and usually appear on one side, but may be present on both sides in 25 to 50% of cases. Frequency of preauricular sinus differs depending on race, 0.1-9% in the US, 0.9% in the UK, and 4-10% in Asia and parts of Africa. Frequency is known to be higher in black people and Asians compared to white people. The regular treatment available is excision of the tract but the chances of recurrence are high. Acharya Sushruta has categorized sinus under the heading of *nadivrana*. Preauricular sinus has not been described as a separate disease entity in classical texts but can be considered as a *na-divrana*. Many treatment modalities are described for the treatment of *nadivrana* which includes *ksharasutra*, *vartiand taila*. *Kshara*, due to its *ksharana* and *kshanana* properties can play an important role in the healing as well as preventing the recurrence of the *nadivrana*. A case of preauricular sinus treated successfully with *ksharavarti* has been reported here. A 21 year old male patient who complained of pus discharge near the right ear was treated with *ksharavarti* prepared with *arkaksheera* and *haridrachoorna* was applied on alternate days for seven sittings and for two times in a week for six sittings which showed marked improvement with respect to the healing of the sinus.

Keywords: Excision, *Ksharavarti*, *Nadivrana*, Preauricular sinus, Recurrence.

INTRODUCTION

A sinus is a blind-ending tract that connects a cavity lined with granulation tissue (often an abscess cavity) with an epithelial surface. Sinuses may be congenital or acquired. Congenital sinuses arise from the remnants of embryonic ducts that persist instead of being obliterated and involuted during embryonic development. Acquired sinuses occur as a result of the presence of a retained foreign body (for example suture material), specific chronic infection (for example tuberculosis (TB) or actinomycosis), malig-

nancy or inadequate drainage of the cavity.^[1]

Preauricular sinus is a congenital sinus which develops from the imperfect fusion of the six tubercles which forms the pinna. This sinus generally opens at the root of the helix or on the tragus. The tract runs downwards and ends blindly. It has a branching tract lined by squamous epithelium. At times the mouth of the sinus becomes closed; a cyst develops and becomes infected.^[2] Surgery is indicated if there is

unsightly swelling or infection. Cyst or sinus has to be completely excised to prevent recurrence.

Sinuses are compared to *Nadivrana* in Ayurveda. Acharya Sushruta has described *nadivrana* in *Amapakveshaneeya adhyaya* and *Grandhivisarpanadisthanaroganidana* and *chikitsa adhyaya*. When the *vaidya* by mistake, misdiagnoses a *pakvashopha* to be an *apakvashopha*, and happens to leave it untreated, in due course of time it penetrates into deeper tissues forming a sinus.^[3]

Acharya Sushruta has described different treatment modalities for the treatment of *nadivrana* like *ksharasutra*, *varti*, *taila*.^[4] *Kshara*, due to its *ksharana* and *kshanana* property removes the unhealthy tissues lining the *nadivrana* and drains out the excessive pus and hence prevents the recurrence of the *nadivrana*.

The case and course of illness

In this case study a 21 year old male patient approached the Shalyatantra OPD of SKAMCH & RC, Bengaluru on 24th March 2015, with complaints of foul smelling pus discharge from an area near the right ear since birth. The pus discharge used to increase after taking head bath. Occasionally he used to experience pain in this region after sleeping on the right side. He was taken to a surgeon by his parents during his childhood who had advised surgery when he attained the age of 20 years. At the age of 13, he noticed 2 more openings adjacent to the primary opening. In 2013 when he consulted an ENT surgeon, he was advised oral medicines for one month but he did not find any improvement. When he consulted again, tract was excised on NOV 27 2013, followed by course of antibiotics, analgesics and local application. After 7 days sutures

were removed and he was advised to continue the oral medicines for one more week.

The symptoms reoccurred after one month so he consulted the same surgeon once again in March 2014 where he was advised oral medications and local application. But he did not find improvement, so he did not take any medicines from April 2014 to February 2015.

No contributing factors related with family history, past history and personal history was obtained.

LOCAL EXAMINATION

Inspection: (Left lateral position)

Small openings at right preauricular region.

Number of openings: 3

Redness of the surrounding skin present

Discharge: yellowish white foul smelling discharge.

On Palpation: No tenderness.

Probing:

Openings	Length of the sinus
1) First – Primary sinus	1 cm
2) Second	} Secondary sinus 0.5 cm
3) Third	

Fig no. 1: showing the three sinuses



Materials used for the procedure

- *Ksharavarti*^[5]
- *Arkaksheera*
- *Haridrachoorna*

Both the above ingredients were mixed well and prepared into small *varti* which was dried in the shade.

Jatyaditaila – For dressing

Fig no. 2: Prepared varti



Method of application

Under aseptic precautions, the surrounding area was cleaned with spirit and the sinus was cleaned with betadine solution. The *ksharavarti* was inserted into the three sinuses on alternate days for seven sittings and there after twice in a week for six sittings. By this time the secondary sinuses were healed and *jatyadi taila* dressing was done for the healed sinuses. After this, *Ksharavarti* was applied in the primary sinus once in a week for three sittings. Inter-

OBSERVATIONS

The observations made during the treatment have been tabulated as given below.

Table No.1

Date of treatment	Outcome Noticed
25/03/15	Soon after insertion of the <i>varti</i> burning sensation was noted and it persisted for few hours. Pus discharge was also present.
09/04/15- After seven sittings	Profuse pus discharge and burning sensation was noted in all the three sinuses.
02/05/15 – After six sittings	Pus discharge and mild burning sensation was noted in the primary sinus. There was no pus discharge from the secondary sinuses. Secondary sinuses were closed. <i>Jatyadi taila</i> dressing was done.
04/05/15	Minimal pus discharge was noted from the primary sinus. Secondary sinuses were closed. <i>Jatyadi taila</i> dressing was done.
12/05/15	No pus discharge was noted from the primary sinus. <i>Jatyaditaila</i> dressing was done. Secondary sinuses were healed.

nally, Tablet *Triphalaguggulu* and tablet *GandhakaRasayana* were given in the dosage of 2 tabs twice daily for fifteen days with *usnajala* as *anupana*.

During this procedure, the patient was advised to avoid exposure to dust and wind and to avoid head bath.

Fig no. 3: Varti inserted into the primary sinus



19/05/15

No pus discharge was noted from the primary sinus. *Jatyadi taila* dressing was done.
The secondary sinuses were healed.

Fig No. 4: Showing the sinuses during treatment



Fig no. 5: Showing the healed sinuses.



Follow up: once in every week to note any recurrences in the healed sinuses. The patient is asked to avoid exposure to wind, dust and to avoid taking head bath in the follow up period also.

DISCUSSION

Kshara sutra has proved out to be an effective treatment in *nadivrana* especially in cases of *shalyaja nadivrana* (Pilonidal sinus). In this particular *nadivrana*, the size of the tract was very small and the location also had cosmetic importance. Keeping these points in mind, treatment for *nadivrana* with *ksharavarti* was adopted. It has *ksharana* (removal of unhealthy and dead tissues) and *kshanana* (cleansing action) properties of *kshara*.^[6] *Kshara* has *lekhana* property and by virtue of which the unhealthy granulation tissue is replaced by healthy granulation tissue and thus it facilitates healing. *Triphalaguggulu* and *Gandhakarasyana* gave the added effect of promoting the proper healing of the *nadivrana* due to their *vranaropana* properties.

CONCLUSION

The pre-auricular sinus being a congenital disease is *krichrasadhya* ie, it can be

cured with difficulty. The chances of recurrence are very high. It is very difficult to drain out the pus collection in this sinus due to its position. *Ksharavarti* application is an easy procedure and also cost effective. The patient got good relief and the tract was completely healed. Hence this treatment modality can be adopted in clinical practice and further clinical trial should be conducted on a larger sample to assess the healing, recurrence and formation of the scar with cosmetic point of view.

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