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An Ayurvedic Management on Karnastrava: A Comprehensive Case Study

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ABSTRACT:
Karnastrava is described among the 28 Karna Rogas in Ayurveda and is defined by Acharya Suśruta as an abnormal discharge from the ear. Based on its clinical features, it can be correlated with Chronic Suppurative Otitis Media (CSOM), a condition marked by persistent ear discharge and varying degrees of hearing disturbance. CSOM is commonly classified into Tubotympanic (mucosal) and Atticoantral (squamous) types.
A 30-year-old female patient reported to the Shalakya Tantra OPD with complaints of profuse discharge from the right ear for 10 days, along with heaviness, mild hearing loss, and occasional pain. These symptoms were consistent with the Ayurvedic diagnosis of Karnastrava. The treatment plan aimed to reduce discharge, control infection, and restore ear function.
Management began with Pramarjana, a gentle cleansing of the ear, followed by Karnadhoopana, a traditional fumigation therapy. The fumigation mixture contained Guggulu, Shuksha Nimba Patra, Vacha, Sarshap and Haridra, selected for their antimicrobial, drying, and anti-inflammatory actions. Additionally, Rasanadi Guggulu was administered internally for 21 days to enhance systemic healing.
At the end of treatment, the patient showed marked improvement, with significant reduction in discharge, relief from heaviness and pain, and better hearing. The outcome suggests that Ayurvedic interventions can be beneficial in managing Karnasrava corresponding to CSOM.

KEYWORDS: Karnastrava, CSOM, Ear Discharge, Acharya Sushruta.

INTRODUCTION:

Karnastrava is described by Acharya Sushruta as one of the 28 Karna Rogas[1]. Acharya Charaka classifies Karnastrava into 4 types[2], whereas Acharya Vagbhata mentions twenty-five varieties of Karna Roga and discusses the treatment of Karnastrava without listing it as an independent disease entity[3]. According to Acharya Sushruta, factors such as Shiro-abhighāta, Jala-nimajjana, Karna-pāka, and Karna-vidradhi can lead to the development of Karnastrava. The fundamental pathological mechanism involved is Āvṛta Vāta.[4]
Clinically, the features of Karnastrava resemble **Chronic Suppurative Otitis Media (CSOM)**, a persistent infection of the middle ear cleft characterized by continuous ear discharge and a permanent perforation of the tympanic membrane. CSOM is more prevalent in developing nations due to factors such as low socioeconomic status, malnutrition, and inadequate health awareness. In India, it affects individuals of all ages and both sexes, with a reported prevalence of 46 per thousand in rural areas and 16 per thousand in urban populations. CSOM remains a major cause of hearing impairment in rural communities.[5]

Conventional management primarily relies on prolonged courses of systemic antibiotics and various surgical procedures. Long-term oral antibiotic therapy may produce undesirable side effects, while surgical interventions carry inherent risks and potential complications. Therefore, a safe, economical, and effective alternative is desirable. The general Ayurvedic therapeutic line for Karnastrava includes Shirovirechana, Dhoopana, Karnapurana, and Dhavana.

Considering this background, the present study aims to evaluate the combined efficacy of Karna Dhoopana[6] (using Guggulu, Shushka Nimba Patra, Vacha, Sarshapa, Haridra) along with the internal administration of Rasanadi Guggulu[7] in the management of Karnastrava.

AIM AND OBJECTIVES –

To see the efficacy of Karnadhoopana, and internal medicines in the management of Karnastrava w.s.r to CSOM by a single case study.

CASE REPORT:

A 30-year-old female patient came to Shalakya Tantra ENT OPD, presented with chief complaints of pain, purulent discharge from right ear from 10 days, also reduced hearing and itching was noted for the last 10 days. The patient received oral antibiotics and analgesics medications for 7 days but had no relief.

On Examination –

- Foul smelling mild discharge was seen in external acoustic meatus.
- No family history of illness.
- Rinne Test was negative.
- Weber Test was lateralized to the affected (right) side.
- Air-Bone Conduction was normal in the left ear.

Personal History:

1. Appetite - Normal
2. Bowel - Clear
3. Micturition - Clear
4. Sleep - Reduced and Disturbed due to pain

Family History: Nothing specific

General Examination:

1. Pallor: Absent
2. Edema: Absent
3. BP:130/80mnhg
4. Pulse: 74/min
5. Lymphadenopathy: Absent
6. Icterus: Absent
7. Cyanosis: Absent
8. Clubbing: Absent

Ashtavidha Pareeksha:

1. Nadi - Pitta Vataja
2. Mala - Prakruta
3. Mutra - Prakruta
4. Jivha - Prakruta, Nirama

5. Shabda - Prakruta
6. Sparsha - Raksha
7. Drik - Prakruta
8. Akruthi - Madhyama

TREATMENT:

1. Nidan Parivarjana
2. Karnadhoopana with Guggulu[8,9,10], Nimba[11.12,13], Vacha[14,15], Sarshap[16], Haridra[17,18], for 7 days with 7 days gap for 2 settings once a day for 21 Days.
3. Rasanadi Guggulu 500 mg 2 times per day after meal with Ushnodak.

DRUG REVIEW:

Drug	Rasa	Guna	Virya	Vipaka	Prabhava	Dosha Karma
Guggulu	Tikta, Kashaya	Laghu, Ruksha, Sara	Ushna	Katu	Lekhana, Yogavahi	↓Kapha, ↓ Vata
Nimba Patra	Tikta, Kashaya	Laghu, Ruksha	Sheeta	Katu	Krimighna, Rakta-shodhaka	↓Pitta, ↓ Kapha
Vacha	Tikta, Katu	Laghu, Ruksha	Ushna	Katu	Krimighna	↓ Kapha, ↓ Vata
Sarshap	Katu	Laghu,Tikshna, Ruksha	Ushna	Katu	Kaphaghna,	↓ Kapha ↓Vata
Haridra	Tikta, Katu	Laghu, Ruksha	Ushna	Katu	Kledaghna, Vishaghna	↓Kapha, ↓Pitta

FOLLOW UP –

The patient came regularly for the complete treatment without any single relapse. After completion of treatment patients were assessed after 3 weeks there were no symptoms of recurrences. The patient got symptomatically relief which is mentioned below in table.

Table 1: Assessment of Classical signs and symptoms in each follow up –

S. No.	Symptoms	BT (Before Treatment)	After 1st sitting (Day 7th)	Follow up (day 16th)	AT (After Rx) (Day 21st)	Follow up after 3 weeks
1	Earache	2	1	0	0	0
2	Itching	2	1	1	0	0
3	Impaired hearing	1	0	0	0	0
4	Discharge	3	1	1	0	0

Table 2 : Grading suggests –

S. No.	Characteristics Features	Grade
1	Earache ○ No earache	0

	○ Not continuous ○ Continuous but not incapacitating normal activity ○ Continuous throughout and incapacitating normal activity	1 2 3
2	Itching ○ No itching ○ Occasional itching ○ Continuous mild itching ○ Continuous severe itching	 0 1 2 3
3	Impaired hearing ○ Absent ○ Unable to hear the whispering voice ○ Unable to hear normal voice ○ Unable to hear a loud voice	 0 1 2 3
4	Discharge ○ Absent ○ Mild – scanty secretion near the tympanic membrane ○ Moderate – secretion irritating in the ear canal ○ Severe secretion coming out of ear canal	 0 1 2 3

PROCEDURE OF KARNADHOOPANA[19] :

Purva Karma :

The patient is asked to sit comfortably on a chair, in a place having sufficient light and devoid of dust. The affected ear is cleaned thoroughly with cotton swab.

Pradhan Karma :

The patient is asked to relax completely on the chair and fumes are passed to the ear with dhoopana yantra. Dhoopana yantra has two ends one which is funnel shaped kept covering the ear for the passage of Dhuma into the ear canal and other end in which Guggulu, Shuksha Nimba Patra, Vacha, Sarshap, Haridra , keep over ignited charcoal to produce fumes. This Dhoopana was given for 2-3 minutes.

Paschat Karma :

After that procedure, patient advised to avoid cold and refrigerated food and drinks, cold water bath, cold wind, also prevent water from entering the ear.

MODE OF ACTION :

Dhoopana Dravya Karma- The mode of action of Dhoopana Dravya is due to Agnisanskar. Dhoopan dravya has Vayu, Akash and Agni Mahabhootaadhikya. Sukshma Strotogamitva is attained owing to the combination of these Mahabhootas. So, the sterilization property of drugs is delivered and released in every corner and at microbiological level. It has a specialized combined effect on spiritual, medicinal and psychological aspects. Dhoopana karma implies fumigation of the desired or the affected area, with essential drugs or objects taken as per need. Generally, the drugs chosen for Dhoopana are Laghu in guna and katu, tikta rasatmak and contain volatile content. Dravya are chosen depending on the condition where they are used, and on their rapid volatile and spreadable properties. Therapeutically, it plays an important role in the conditions such as Vedana, infestation of Krumi, Ati Srava, Kandu, Vrana and to sterilize the Chikitsagara, Sootikagara, Kumaragara, Shastra, Yantra, Household area,

pharmaceutical area (Sandhan prakriya) etc. The properties of the Dhoopa in general are rooksha, laghu, ushna, vishada, strotoshodhana, krumighna etc. It also possesses kledaghna, shoolaghna, vranaropaka, shothahara property.

DISCUSSION :

According to Ayurvedic classics, Vata Dosha plays a central role in the pathogenesis of Karnastrava, where Strava (discharge) is its cardinal feature. The therapeutic principle of Rūkṣa Sveda includes drying properties, which are beneficial in conditions characterized by excessive discharge. Hence, in Karnastrava, Karna Dhoopana serves a dual purpose: it helps to dry the aural discharge and simultaneously creates an environment that is unsuitable for microbial proliferation. The medicated fumes also exert a sudating effect, promoting drying of the discharge. In addition, the heat generated during Dhoopana produces vasodilation and enhances local blood circulation, which facilitates better drug absorption and accelerates healing.

Pharmacological Rationale of Selected Dhoopana Dravyas :

• Guggulu :

Guggulu, an oleo-gum resin, possesses anti-inflammatory, antiseptic, and antimicrobial properties. Its fibrinolytic action assists in the removal of fibrin, thereby supporting the healing of the tympanic membrane. Classical texts identify Guggulu as one of the most effective herbs for managing Vata-related disorders.

• Nimba (Neem) :

Neem contains Azadirachtin, a potent compound with proven insecticidal and antimicrobial activities. Fumigation with volatile oils of Azadirachta indica demonstrates strong insect-repellent action. In Ayurveda, Nimba is described as Kandughna, Krimighna, and Kushtaghna, and is characterized by Katu–Tikta Rasa and Laghu–Rūkṣa Guna. It is also considered a Rakshoghna Dravya, known for preventing microbial contamination.

• Vacha :

Vacha is endowed with Katu Rasa, Laghu and Tikshṇa Guna. Its major active constituent, asarone/asarinaldehyde, exhibits significant antibacterial activity, effective against organisms such as Salmonella typhi, Pseudomonas aeruginosa, Klebsiella pneumoniae, and Staphylococcus aureus. Thus, it helps inhibit bacterial growth within the ear.

• Sarshapa (Mustard) :

Sarshapa possesses Katu–Tikta Rasa, and Tikshṇa–Rūkṣa Guna, with the active compound allyl isothiocyanate, known for its strong bactericidal (krimighna) action. It supports microbial control and reduces infection.

• Haridra (Turmeric) :

Haridra, with Tikta–Katu Rasa and Rūkṣa properties, contains curcumin and other volatile oils. It exhibits broad-spectrum antibacterial effects against both Gram-positive and Gram-negative organisms, aiding in infection control and promoting healing of the middle ear.

CONCLUSION:

Considering all therapeutic aspects, Ayurvedic Karna Dhoopana Karma plays a significant role in the management of Karnastrava. In the present case, noticeable improvement was observed in terms of reduction in ear discharge, ear pain and improvement in hearing. This suggests that Guggulaādi Karna

Dhoopana, along with internal administration of Rasanādi Guggulu, is effective in the management of Karnastrava.

During the procedure, the medicated fumes—rich in volatile, bioactive components—enter the external auditory canal and reach the tympanic membrane. Because of their therapeutic properties and mild heat, these vapors get absorbed through the membrane and diffuse into the tympanic cavity, where the ossicles (malleus, incus, and stapes) are located. The medicinal effects help reduce local inflammation, clear infections, and promote healing. Additionally, the warmth and pharmacological action stimulate the vestibular and cochlear nerves, thereby supporting the proper functional activity of the ear.

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