

A CASE STUDY ON THE EFFICACY OF *SAMUDRAPHENA CHURNA* IN THE MANAGEMENT OF *KARNASRAVA* (CSOM)

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ABSTRACT

Chronic suppurative otitis media is one of the most common complaint encountered in clinical practice and involves 65–330 million individuals with draining ears, 60% of whom (39–200 million) suffer from significant hearing impairment. Chronic suppurative otitis media is common infectious ailment affecting mostly children all over globe. It is one of the commonest causes of preventable deafness and can be correlated to *Karnasrava* which is characterized by discharge from *Karna* and occurs mainly due to *Aavarana* of *Vata Dosha*. The management strategies are limited in conventional system of medicine. Aural toileting remaining one of the basic and safe measure to achieve

dry ear. Medicinal and surgical options are not free from side effects and many times may not be beneficial. Ayurveda stipulates a multimodal approach to this problem with use of various local procedures and oral medications. In present case study, 74 year old female patient came with complaints of recurrent ear discharge, pain and itching in both ears since 5 years and was diagnosed as *Karna Srava* or Chronic suppurative otitis media. She was treated by *Karnapichu* with *Samudraphena churna* (Cuttlefish bone powder). The signs and symptoms were studied before and after treatment and result of the study indicates that *Samudraphena churna* is effective in curing *Karnasrava*.

KEYWORDS: *Karna Srava*, Chronic suppurative otitis media, Cuttlefish Bone, *Samudraphena*, *Karnapichu*.

INTRODUCTION

Karnasrava is a disease mentioned by *Acharya Sushruta* in the chapter of *Karnaroga Vigyaniya* under twenty eight *Karnarogas*.^[1] *Acharya Charaka* included *Karnasrava* as a symptom under the four types of *Karnarogas* due to vitiation of different *Doshas*.^[2] The clinical manifestations of *Karnasrava* (discharge) can be considered under Chronic suppurative otitis media (CSOM) in modern science. CSOM is the chronic inflammation of the middle ear and mastoid cavity. It is characterised by recurrent or persistent ear discharge (otorrhoea) over 2-6 weeks. The external auditory canal may or may not be oedematous and is not typically tender. The discharge varies from fetid, purulent, and cheesy like to clear and serous. It is predominantly a disease of the developing world. Clinical features are recurrent otorrhoea through a tympanic perforation, with conductive hearing loss of varying severity. Experts dispute the duration of otorrhoea required to determine it as a chronic infection. The World Health Organization's definitions suggest the discharge to be more than two weeks^[3] whereas others consider it to be longer up to six weeks. The underlying pathology of CSOM is an ongoing cycle of inflammation, ulceration, infection and granulation. Acute infection of the middle ear causes irritation and inflammation of mucosa of the middle ear with oedema. Inflammation produces mucosal ulceration and breakdown of the epithelial lining. Granuloma formation can develop into polyps in the middle ear. This process may continue, destroying surrounding structures and leading to the various complications of CSOM. A history of previous ear discharge, especially when accompanied by episodes of colds, sore throat, cough or some other symptoms of upper respiratory infection, should raise the suspicion of CSOM. The diagnosis of CSOM rests on the verification of a discharging tympanic perforation. This is only possible by removing any obstructing wax, ear discharge, debris or masses in the external auditory canal and visualizing the whole expanse of the eardrum and if possible, the middle ear through the perforation. In modern Science, patients of CSOM are treated with daily instillation of topical antiseptics or antibiotics after meticulous aural toilet for at least 2 weeks, intravenous antibiotics, anti pseudomonal drugs etc. Surgery is also advised in case of intracranial and extracranial involvement. In modern science most approaches to treat CSOM have been surgical, expensive, difficult and does not lead to satisfactory hearing improvement. Considering all these points, there is a need to search an effective, preventive and safe treatment. In *Ayurveda*, the general line of treatment of *Karnasrava* includes *Shirovirechana*, *Dhupana*, *Karnapurana*, *Pramaarjana*, *Dhaavana*, *Prakshaalana*, *Karnapichu*, *Karna partisaran*. In present study, *Karnapichu* is selected. No direct reference is available of *Karnapichu* in the

classical texts. But there are evidences in the Brahatrayee to modify the therapeutic procedure as per the needs of the physician and patient. It is the technique which is evolved from the concept of *Shiropichu a kind of Murdhani Taila*. As *Karnapichu* is an effective treatment for *Vata* disorder. It act as *Vrana ropana* (wound healing), *Vedanaharan* (reduce pain) on localized area and helpful in inflammatory conditions of ear. Pichu is also used for curing various degenerative condition. *Samudraphena* is one such Ayurvedic drug used in the treatment of wounds, ulcers and skin ailments as well.^[4] It is called ‘Cuttle fish bone’ in English and ‘*Samundra chhag*’ in Hindi, mean the froth of the ocean. Even though it is termed as froth, in fact it is not the froth but the bony skeleton of the fish after its death. As this bone resembles like the froth with its characteristic white colour, therefore it is termed by this name. In *Ayurvedic* texts it is mentioned by different synonyms like *Abdhiphena*, *Hindeera*, *Abdhikapha*, *Phena* etc. The Zoological name of this fish is *Sepia officinalis* and it belongs to Cephalopoda family of Mollusca Class. As per text book – In *Bhavaprakasha*, *Samudraphena* is coolant (for external application), astringent in taste and motile (sara) in nature. According to *Yogratanakar samudraphena churna* is useful in *karansrava*(CSOM).^[5]

CASE REPORT

A 74 year old female patient came to *Shalakya* OPD of National Institute of *Ayurveda*, Jaipur, with complaints of excessive ear discharge, pain, itching in both ears. Profuse discharge comes out of ear canal and stains the pillow during sleep. These symptoms were occurring once in 15- 20 days since past 5 years. According to patient complain of ear discharge was increased during attack of common cold. She was diagnosed with CSOM in both ears and took Allopathic treatment but didn't get satisfactory relief. Since the patient was explained about the prognosis of her condition by an ENT expert, she had chosen *Ayurvedic* intervention for getting better relief.

Investigations

Reports of routine haematological tests like haemoglobin, total leukocyte count, differential count, were within normal limits. The Erythrocyte sedimentation rate was raised to about 42 mm.

Ear swab culture and sensitivity- Organism isolated: 1. *Escherichia Coli* 2. *Pseudomonas Aeruginosa*.

PTA-B/L Severe mixed hearing loss.

On examination

- Otoloscopic examination: Bilateral External auditory canal and tympanic membrane not visualize due to active thick discharge. After cleaning of ear discharge, subtotal perforation found in both ears.
- Consistency: purulent and thick in consistency.
- Colour: greenish.
- Smell: Non- foul smelling discharge.
- Quantity: Profuse discharge, comes out of ear canal and stains the pillow during sleep.
- Stage of discharge: Active.
- Bilateral mastoid region: No tenderness present.
- External nose: Normal appearance.
- Anterior rhinoscopy-
Nasal mucosa- congested.
Bilateral inferior turbinates hypertrophy.
- Throat examination-
Oropharyngeal mucosa- Mild congested.

Treatment administered

Karnapichu of *Samudraphena churna* - for 4 sittings with gap of one day in between.

Procedure of *Karnapichu*

First the patient was made to sit comfortably then her external auditory canal was mopped properly. A long thick cotton wick was prepared and then soaked into *Nimbuka Swaras*. Then fine powder of *Samudraphena* was spread on the wick (*Pichu*). The *Pichu* was inserted in the external ear with the help of Tilley's dressing forceps. Duration of *Karnapichu* has been not clearly explained in *Samhitas*. In present case, *Pichu* was kept for the duration of 2 hours. *Samudraphena churna* used for *Karnapichu* before procedure was purified with *Nimbuka swaras*.

RESULT

After four successive sittings, there was complete relief in all the symptoms like pain in ear, discharge and itching. Erythrocyte sedimentation rate was reduced to 10 mm. The patient was

advised to keep dry ear. During follow up period of 2 months, there was no recurrence of the complaints and complete relief was achieved. Dry perforated tympanic membrane was observed after 2 months. No adverse effects were noticed.

DISCUSSION

Karnasrava is explained as a symptom and as a disease in *Ayurveda*. While describing the etiological factors of *Karnasrava*, *Aacharya* have given special emphasis to *Jalanimanjjana* and *Karnakanduyana* which is commonly found in otomycosis. In *Samprapti* of *Karnasrava*, *Aacharya Sushruta* has mentioned that *Avarana* of *Vata* by other *Dosha* is the chief culprit for initiation of the pathology.^[6] By assessing the symptoms, it can be said that *Kapha Aavrita Vata Dosha* is responsible for the manifestation of clinical features like discharge, pain, itching, etc. In CSOM, mainly mucoid or mucopurulent type of discharge is present which shows the condition of *Paka*. While removing the fungal mass, ulceration of external auditory canal is likely to happen. The mode of action of the drug under treatment can be understood on the basis of inherent properties of the drug.

According to *Rastarngini*, the drug *Samudraphena* have a property like *Kaphanashaka* and *shrutishravhara param*.^[7] Due to its property like kashaya Rasa, it acts as drying agent and absorbs excess moisture, stops leakage of fluid, cleanses the mucus membrane, helps to heal wound. *Ruksha* guna increase dryness, absorption. Its *Karma* is *lekhna*, *Pachna*, *ropana*. It have anti-bacterial, anti-septic effect and also anti-oxidative property.

Nimbuka swaras (Citrus lemon) is a rich source of vitamin C which helps in healing with antibacterial and antiviral properties. *Samudraphena* is rich in potassium, calcium, magnesium with antioxidant action in ear and its application in the form of *Karnapichu* purified blood by its anti-inflammatory, pacified *Tridoshaja* primarily *Vata* and *Kapha* and also relieved pain with the removal of toxic substances. Hence this local procedure of *Karnapichu* with *Samudraphena* along with *Nimbuka swaras* cured the disease *Karansarav* (CSOM).

CONCLUSION

Ayurvedic line of treatment in the form of *Karnapichu* with *Samudraphena churna* gave fruitful result in the management of *Karnasrava* which is economical and easily available. This study is conducted in a single patient and hence it can be advocated on large sample to prove its efficacy in a better way.

REFERENCES

1. Acarya Jadavaji Trikamji., editor. Nibandhasangraha Commentary of Shri Dalhanacarya. 7th ed. 3-5. Vol. 20. Varanasi: Chaukhamba Orientalia; 2002. Sushruta, Sushruta Samhita, UttaraTantra.
2. Acarya Jadavaji Trikamji., editor. Ayurveda Dipika Commentary of Cakrapanidatta. Re-print ed. 3-5. Vol. 26. Varanasi, India: Chaukhamba Surbharati Prakashana; 2008. Agnivesha. Charaka Samhita- Chi.
3. Chronic suppurative otitis media-burden of illness and management options: world Health organization, 2004.
4. <https://easyayurveda.com/2017/10/22/cuttlefish-bone-samudraphena>.
5. Yogaratnakara hindi commentary, Vaidya Laksmipati Sastri, edited by Bhisagratna Brahmasnkar Sastri, Chaukhmba parkashan Varanasi, Re-print ed. 2018(pg.no.316/1).
6. Acarya Jadavaji Trikamji., editor. Nibandhasangraha Commentary of Shri Dalhanacarya. 7th ed. 3-5. Vol. 20. Varanasi: Chaukhamba Orientalia; 2002. Sushruta, Sushruta Samhita, Uttara Tantra.
7. Rastarangini, sadanand sharma, (pg.no.305/113) motilala banarsidas (Delhi), 11th ed. 1979; Re-print, 2014.