

KARNASTRAVA (CHRONIC SUPPURATIVE OTITIS MEDIA) AND ITS MANAGEMENT THROUGH AYURVEDA – A CASE STUDY

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ABSTRACT

Introduction: Chronic suppurative otitis media is a chronic inflammation of the middle ear that is characterized by discharge from the middle ear through a perforated tympanic membrane along with swelling and pain. As *karnastrava* is the condition characterized by discharge from *karna* (ear) and mainly occurs due to *avarana* of *vata doshas*. **Aim:** To study the role of *Nimbaharidradi Dhoopana* and *Arogyavardhini* in the management of *karnastrava* w.s.r to CSOM.

Objective: To study the role of *Nimbaharidradi Dhoopana* and *Arogyavardhini* to reduce the symptoms of *karnastrava* w.s.r chronic

suppurative otitis media (CSOM). **Material and methods:** Single clinical trial of *Nimbaharidradi Karna Dhoopana* for 7 days with 7 days gap for 2 sittings along with *Arogyavardhini Vati* 2 BD for 28 days. **Conclusion:** *Karna Dhoopana* with *Nimbaharidradi Varti* and *Arogyavardhini Vati* internally gives significant relief in *Karnastrava*.

KEYWORDS: *Karnastrava*, chronic suppurative otitis media, *Karna Dhoopana*, *Nimbaharidradi Varti*, *Arogyavardhini Vati*.

INTRODUCTION

Karnastrava is one among the 28 *Karna rogas* described by *Acharya Sushruta*.^[1] According to *Charaka* there are 4 types of *KarnaStrava*.^[2] *Acharya Vagbhata* mentioned 25 types of *Karna Roga* in that *Chikitsa of Karnastrava* explained and has not described *Karnastrava* as a separate disease.^[3] *Acharya Sushruta* has said about etiology of the disease *Shirobhighata* (head injuries), *Jala nimajjana* (diving in water), *Karna Paka*(inflammation of aural mucosa) and *Karna Vidradi*(ear abscesses) causes *Karnastrava* .*Avrita Vata* is the underlying pathology for *Karnastrava*.^[4]

Classical features of *Karnastrava* can be compared to chronic suppurative otitis media (CSOM). *CSOM* is a long standing infection of a part or whole of middle ear cleft characterized by ear discharge and permanent perforation).

Incidence of CSOM is higher in developing countries because of poor socio economic standards, poor nutrition and lack of health education.

It affects both sexes and all age groups in India overall prevalence rate is 46 and 16 persons per thousand in rural and urban population respectively. It is also single most important cause of hearing impairment in rural population.^[5]

The principle treatment include long duration of antibiotics orally and surgical treatments. Oral medication for longer duration having more side effects and surgical method leads to complications. So effective treatment approach is simple and economical.

General line of treatment of *Karnastrava* includes *Shirovirechana*, *Dhoopana*, *Karnapurana*, *Dhavana*.^[6] With this background present study has been intended to evaluate the combined efficacy of *Karna Dhoopana* with *Nimbaharidradi Varti* and *Arogya Vardhini vati* internally in the management of *Karnastrava*.

AIM AND OBJECTIVES

To assess the combined effect of *Nimbaharidradi Karna Dhoopana* and *Arogyavardhini Vati* internally in *Karnastrava*.

MATERIAL AND METHOD

A 25 years old female patient of *Karnastrava* was selected during the opd of treatment of *Shalakyatantra* having chief complaints of discharge in right ear since 3 months. Reduced hearing and itching since 2 months.

Local Examination

Small central perforation in anteroinferior quadrant in right tympanic membrane with mild discharge seen in external acoustic meatus where as left tympanic membrane and canal was normal. Oropharyngeal and nasal examination revealed no abnormalities.

N/H/O of any other illness. No family history of illness. Rinne's test was negative.

Weber test was lateralized to affected side (right) side and ABC was normal.

Investigations

Pure tone audiometry.

Blood for haemoglobin percentage – 11.7 gram %. Differential count – WNL

Erythrocyte sedimentation rate – 18mm.

X ray mastoid and PNS to rule out *Mastoiditis* and *Sinusitis*. RBS – 98 mg/dl.

Treatment

- 1) *Nidanparivarjana*
- 2) *Karnadhoopana* with *Nimbaharidradi Varti* for 7 days with 7 days gap for 2 settings and *Arogyavardhini vati* 2BD with luke warm water internally twice a day for 28 days.

Drug Review

<i>Dravya</i>	<i>Rasa</i>	<i>Guna</i>	<i>Virya</i>	<i>Vipaka</i>	<i>Karma</i>
1. <i>Guggulu</i>	<i>Tikta katu</i>	<i>Laghu ruksha</i>	<i>Ushna</i>	<i>Katu</i>	<i>Vranashodhana</i> <i>Vranaropana</i> <i>Shothahara</i>
2. <i>Nimba</i>	<i>Tikta Kashaya</i>	<i>Laghu Ruksha</i>	<i>Sita</i>	<i>Katu</i>	<i>Kandughna</i> <i>Kushtaghna</i>
3. <i>Haridra</i>	<i>Tikta Katu</i>	<i>Ruksha Laghu</i>	<i>Ushna</i>	<i>Katu</i>	<i>Kushtaghna</i> <i>Vranashodhana</i> <i>Vranaropana</i> <i>Lekhana</i> <i>Shothhara</i>

Contents of *Arogyavardhini vati*^[7,8,9]

S. No	Ingredient	Botanical Name	Amount
1.	<i>Shuddha Parada</i> (Herbal purifier mercury)	-	1 part
2.	<i>Shuddha gandhaka</i> (Herbal purified sulpher)	-	1 part
3.	<i>Loha bhasma</i> (Ash prepared from iron)	-	1 part
4.	<i>Abhraka Bhasma</i> (Purified and processed Mica)	-	1 part
5.	<i>Tamra Bhasma</i> (Purified and Processed Mica)	-	1 part
6.	<i>Triphala</i> a. <i>Haritaki</i> – Chebulic Myrobalan Fruit rind b. <i>Bibhitaki</i> – Belliric Myrobalan fruit rind c. <i>Amalaki</i> – Indian gooseberry	a. <i>terminalia chebula</i> Retz b. <i>Terminalia bellirica</i> Roxb c. <i>Emblica officinalis</i> Gaertn	2 part
7.	<i>Shilajatu</i> (Mineral pinch)	Asphaltum	3 part
8.	<i>Pura – Guggulu</i> – Indian bedelium (gum resin)	<i>Commiphora mukul hook</i> ex stocks	4 part
9.	<i>Chitramool</i> – root of Indian led word.	<i>Plumbago zeylanica</i> Linn	4 part
10.	<i>Tikta - Katuki</i>	<i>Picrorhiza kurroa</i> Royle ex Benth	Equal of above
11.	Juice extract of <i>Nimba</i> leaf - Neem	<i>Azadirachta indica</i> A.juss	Quantity as per need for making pill

Procedure of *Karnadhoozana****Purva Karma***

The patient is asked to seat 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 *Nimbaharidradi varti* (*nimbi patra churnaharidra* and *guggul*) keep over ignited charcoal to produce fumes. This *Dhoopana* was given for 5 minutes.

Paschat karna

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

Assessment criteria

Subjective parameters	
Impaired hearing	0 – Absent 1 – Unable to hear whispering voice 2 – Unable to hear normal voice 3 – Unable to hear loud voice
Objective parameters	
Ostoscopic examination	
1. Ear discharge	0 – Absent 1 – Mild - scanty secretion near tympanic membrane 2 – Moderate - secretion irrigating in the ear canal 3 – severe - secretion coming out of ear canal
2. Perforation	0 – No perforation of tympanic membrane 1 – Mild - pin hole, small central perforation 2 – Moderate - large central perforation 3 – Severe - subtotal perforation
Pure tone audiometry	0 – Up to 25 dB 1 – 26 to 45 dB 2 – 45 to 65 dB 3 – more than 65 dB

OBSERVATION AND RESULT**Subjective parameters**

	B.T Day 1	Day 8	Day 15	Day 28
1) Impaired hearing	1	1	1	1

Objective parameters

Otoscopy examination

2) Ear discharge	1	1	0	0
3) Perforation	1	1	1	0
4) Pure tone Audiometry	1	1	1	1

DISCUSSION

According to our classics *Vata Dosha* is responsible for *Karnastrava* in which *Strava* is the main symptom and one of the most important feature of *Ruksha Sweda* is to dry. Hence in *Karnastrava* the *Karnadhoopana* not only dries up the *Strava* but also creates an unfavourable condition for growth of microbes.

The fumes of *Dhoopana* may bring about the sudative effect and dries up the *Strava*. Heat also causes Vasodilatation and increased blood circulation there by helping in better absorption of drug and healing.

Guggulu is an oleo gum resin having anti-inflammatory, antiseptic, antimicrobial property, fibrinolytic property of *Guggulu* may help in removal of fibrin and so healing of tympanic membrane. *Guggulu* is the best among herb that is described for *Vatarogas* by *Acharyas*.

Azadiractin in the *Neem* seed oil is proven chemical for its insecticidal properties. Fumigation of volatile oils of *Azadiracta indica* have potent insect repellent property. *Nimba* is well known for *Kandughna*, *Krimighna* and *Kushtaghna* properties having *Katu*, *Tikta Rasa* and *Laghu Ruksha Guna* and also it is *Rakshoghna Dravya*.

Curcuma Longa have an effective fungicidal action.

Arogyavardhini vati does the *Shoshana* of different excess *snigdha dravyas* present in the ear. It also does the *pachana* of *drava* and *kleda* and does the *Raktavardhana* so reduce *Dravtatva*, *Snigdhatva* in *meda Dhatu*.

According to *Panchmahabhautikatva* *Karnastrava* having *Prithvi* and *Jala Mahabhuta Pradhan* while *Progyavardhini Vati* has *Akash Vayu* and *Teja Mahabhuta Pradhanatra* so

helpful to reduce *Karnastrava*.

CONCLUSION

Considering the entire factors regarding treatment of karnastrava. Ayurvedic karnadhoopana karma help in management of this disease. In above case study significant reduction was obtained in ear discharge perforation and impaired hearing. Hence Nimbaharidradi karnadhoopana and arogyavardhini vati internally helps in management karnastrava.

REFERENCES

1. *Ambikadatta shastri sushruta samhita of sushruta with Ayurveda Tatva Sandipika Hindi commentary uttar tantra* reprint edition, chapter 20 versus 5, varanasi: chaukhambha Sanskrit sansthana, 2013; 111.
2. *Pt.kashinathshastri and Dr Gorakhnath chaturvedi, Charak samhita of Charaka with Vidyostini hindi commentary sutrasthan*. Reprint edition: 1983 chapter 26 versus 127 *Varanasi: Chaukhambha Bharati academy*, 1983; 742.
3. Kaviraja Atridevagupta Asthangahridaya of Vagbhata with Vidyotini hindi commentary, Uttartantra, reprint edition, 2009 chapter 17 versus 26, Varanasi: Chaukhamba Prakashan, 2009; 694.
4. Ambikadatta Shastri Sushruta Samhita of Sushruta with Aurveda Tatva Sandipika hindi commentary Uttar Tantra reprint edition, chapter 20 versus 10, Varanasi : Chaukhambha Sanskrit sansthana, 2017; 117.
5. Dhingra PL, Dhingra Shruti Diseases of Ear, Nose and Throat 7th edition. Elsevier a division of reed Elsevier India private limited, 2016; 75.
6. Ambika Datta Shastri, Sushuruta Samhitaof Sushruta with Ayurveda Tatava Sandipika hindi commentary, Uttar Tantra reprint edition, chapter 21 versus 40 varanasi; chaukhamba Sanskrit Sansthana, 2017; 131.
7. Ambika Datta Shastri Rasaratna Samuchchya, 9th edition chapter no 20 verse no 87, Varanasi: Chaukhamba Sanskrit publisher, 1994; P-400.
8. Anonyms Rastantrasara and Siddhayoga Sangraha 1st edition, Ajmer, Rajasthan : Krishna gopal Ayurveda Bhavana Publisher, 2015; 150-153.
9. Kaviraj Govinda Das Sen Bhaisajyaratnavali, Siddhipaka Hindi commentary Prof. Siddhinandana Mishra editor. 1st edition Kushtarogadhikara, chapter no-54, verse no 111-117. Varanasi: Chaukhamba Surbharati, Prakashana, 2012; 871.