



**AYURVEDIC MANAGEMENT OF KARNASRAV W.S.R. TO CHRONIC  
SUPPURATIVE OTITIS MEDIA- A CASE STUDY**

**Dr. Abhishek Singh<sup>1</sup>, Prof. Shamsa Fiaz<sup>2</sup>, Dr. Satyavati Dagar<sup>3</sup>, Dr. Malashree S. Gadadi<sup>4</sup>**

1. Dr. Abhishek Singh<sup>1</sup> - PhD Scholar, Department of Shalakya Tantra, National Institute of Ayurveda, Jaipur, Rajasthan-302002
2. Prof. Shamsa Fiaz<sup>2</sup> - Prof. & HOD, Department of Shalakya Tantra, National Institute of Ayurveda, Jaipur, Rajasthan-302002
3. Dr. Satyavati Dagar<sup>3</sup> - PhD Scholar, Department of Shalakya Tantra, National Institute of Ayurveda, Jaipur, Rajasthan-302002
4. Dr. Malashree S. Gadadi<sup>4</sup> - PhD Scholar, Department of Shalakya Tantra, National Institute of Ayurveda, Jaipur, Rajasthan-302002.

**Corresponding Author:** Dr. Abhishek Singh PhD Scholar, Department of Shalakya Tantra, National Institute of Ayurveda, Jaipur, Rajasthan-302002

Email ID:- [abhis1209@gmail.com](mailto:abhis1209@gmail.com)

**MANAGEMENT OF KARNASRAV W.S.R. TO CHRONIC SUPPURATIVE OTITIS  
MEDIA WITH AYURVEDIC TREATMENT - A SINGLE CASE STUDY**

**DOI: 10.48047/ecb/2023.12.si4.1647**

**Keywords: Karnasrava, Chronic suppurative otitis media, Karna Pichu, Sarivadi vati**

**ABSTRACT:**

**Introduction:** CSOM is a clinical condition encountered in ENT practice with discharge from the middle ear cavity. A chronic perforation develops as a result of persistent infection as there is no proper healing. This clinical condition is progressive with deterioration of hearing and infection to surrounding parts of ear. In Ayurveda, this condition can be correlated to Badhirya and if there is conduction defect then we can consider under Vata Kaphaja badhirya.

**Case Details :** A 21-year-old female patient, reported to NIA ENT OPD and presented with chief complaints of purulent discharge from left ear since one year, associated with pain in ear, reduced hearing, ear blockage and itching. On clinical examination subtotal perforation was seen in the anteroinferior quadrant in the left tympanic membrane without any foul smell with slight yellowish mucoid discharge in external acoustic meatus. Rinne test was negative, weber's test was lateralized to the affected (left) side and Air-Bone Conduction was normal in the left ear.

Patient was administered oral medicines like *Sitopaladi churna*, *Godanti Bhasma*, *sarivadi vati*, *gokshuradi guggul* and *Karnapichu* with *Jatyadi taila*. The medicines were continued for 3 months and there was reduction in ear discharge, perforation, and improvement in hearing.

**Conclusion:** With all the above facts it can be concluded that Ayurveda possesses a quality approach to alternative management of CSOM with the use of oral drugs, topical drugs as well as cleaning procedures. Results after treatment are encouraging without any side effects and also boost the immunity of the patients.

---

### **Introduction:**

Acute infections of the ear are seen commonly especially if contaminated water enters the ear. Additionally, there is a loss in hearing of twenty to fifty decibels due to conductive hearing loss. In some cases, the infection persists, leading to a chronic perforation. The perforation typically occurs in childhood and is frequently associated with Eustachian tube blockage. Due to insufficient tympanic membrane surface area, this could result in conductive hearing loss. This kind of hole typically occurs in the middle, and the lining of the middle ear thickens and inflames with time.

Acharya Charaka has described about four types of *Karnaroga* (diseases of ear). Acharya Sushruta has described twenty-eight types of ear diseases.<sup>1</sup> Acharya Vagbhatta has described twenty five types of *Karna roga* (diseases of ear) but did not say anything about *Karnasrava*.<sup>2</sup> Acharya Sushruta is the first who described *Karnasrava* as a disease.<sup>3</sup> Ayurvedic texts have referred *Karnasrava* as a disease rather than a symptom signifying its prevalence. According to Acharya Sushruta the etiology may be trauma to head, drowning or head bath and suppuration of ear abscess which causes *Karnasrava*. He advocates that *Avrita Vata* is the underlying pathology which leads to this condition. Chronic suppurative otitis media is chronic inflammation of mucous membrane lining of the middle ear cleft.

Otitis media is more common in some nations, populations, and ethnic groups than others. According to studies conducted all over the world, the prevalence of acute and chronic suppurative otitis media ranges from 2.3% to 20% and 4% to 33.3%, respectively. In India, the prevalence of acute suppurative otitis media ranges from 17 to 20%, and the prevalence of chronic suppurative otitis media is 7.8%.

**Classification of Otitis media****I. Acute otitis media**

- a) Non suppurative
- b) Suppurative

**II. Chronic otitis media**

- a) Non suppurative
  - i) Otitis media with effusion
  - ii) Adhesive otitis media
  - iii) Tympanosclerosis
- b) Suppurative
  - 1. Tubotympanic type otitis media (safe type)
    - a) Inactive (mucosal): Permanent perforation without discharge
    - b) Active (mucosal) CSOM: Permanent perforation with discharge
    - c) Healed: Tympanosclerosis, healed perforation
  - 2. Attic-antral type otitis media (unsafe type)
    - a) Inactive (squamous): Retraction with no cholesteatoma
    - b) Active (squamous): Retraction pocket with cholesteatoma
    - c) Secondary acquired cholesteatoma

**Specific type of otitis media (tuberculosis, syphilis, diphtheria) <sup>4</sup>****Etiology**

1. Predisposing factors Inadequate treatment of ASOM Infection from surrounding areas like nose, nasopharynx and oropharynx. Some diseases like tuberculosis are in chronic form beginning with Pneumatization of mastoid. Sclerotic mastoids are more prone for CSOM.
2. Exciting factors include Gram negative organisms like Pseudomonas, proteus. E. coli. Streptococcus Staphylococcus

**Patient Information:**

A 21-year-old female patient came to *Shalakya Tantra* OPD on 6 April 2022, presented with chief complaints of purulent discharge from left ear since one year, along with pain, reduced hearing, ear blockage and itching. The patient took allopathy treatment for the same but had no satisfactory relief.

**Clinical findings** - In the left tympanic membrane's anterior inferior quadrant, there was a subtotal Perforation, and the external acoustic meatus had a slight pus discharge which had no discharge. There was no medical history in the family. The Rinne test was negative, the weber's test was lateralized to the affected (left) side, and the left ear's air-bone conduction was Normal.

**Time line:** Patient underwent conservative ayurvedic management for three months with Evaluation during follow up.

**General Examination** - The *Sharirik Prakriti* of the patient was *Vata-Pittaj* and she had a *Madhyam Kostha* (based on bowel habit), *Madhyam Bala* (physical strength), with *Madhyam Satva* (psychological strength).

**Therapeutic Intervention** - After general and specific examination of the patient, the following treatment plan was designed.

**Table 1: Plan of Treatment on 6 April 2022**

S.NO	Drug	Dose	Anupana	
1	Oral medicine	<i>Sitopaladi Churna</i> – 5 g <i>Godanti Bhashm</i> – 250 mg	Two times per day after meal	Honey
2		<i>Sarivadi vati</i>	500 mg two times per day after meal	<i>Ushnodaka</i> (warm water)
3		<i>Gokshuradi guggul</i>	500mg two times per day after meal	<i>Ushnodak</i> (warm water)
4		<i>Ashwagandharishta</i>	10 ml two times per day after meal	<i>Ushnodak</i> (warm water)
5	<i>Karnapichu</i>	<i>Jatyadi Tailam</i>	As required for Local application -2 times per day for 15-20 minutes	

**Follow up** – Follow-up was taken at regular intervals of 15 days for 3 months. After completion of treatment, patients were assessed after 3 months for any symptom's recurrence. No signs or symptoms of recurrence was observed in the patient. The outcome of treatment and follow up is mentioned below in table no.5 with specific grading.

**Table 2:** Assessment of the clinical symptoms are done with following Scale.

S. No	Characteristics features	Grade
<b>1.</b>	<b>Earache</b>	
	No earache	0
	Not continuous	1
	Continuous but not incapacitating normal activity	2
	Continuous throughout and incapacitating normal activity	3
<b>2.</b>	<b>Itching</b>	
	No itching	0
	Occasional itching	1
	Continuous mild itching	2
	Continuous severe itching	3
<b>3.</b>	<b>Impaired hearing</b>	
	Absent	0
	Unable to hear the whispering voice	1
	Unable to hear normal voice	2
	Unable to hear a loud voice	3
<b>4.</b>	<b>Discharge</b>	
	Absent	0
	Mild – scanty secretion near the tympanic membrane	1
	Moderate – secretion irritating in the ear canal	2
	Severe secretion coming out of ear canal	3
<b>5.</b>	<b>Perforation</b>	
	No perforation of tympanic membrane	0
	Mild- Pin hole small central perforation (<2 mm)	1
	Moderate – large central perforation (2 to 3 mm)	2
	Severe subtotal perforation (> 3mm)	3

<b>6.</b>	<b>Pure tone audiometry</b>	
	Up to 25 Db	0
	26 to 45 Db	1
	45 to 65 Db	2
	More than 65 Db	3

**Table 3: Pathyapathya (Dos and Don'ts) Chart –**

<b>Pathya in Karna srava</b>			
A	<i>Ahar</i> (Diet)		
	1	<i>Drava</i>	<i>Purana ghruta</i> (Old Ghee)
	2	<i>Phala</i>	---
	3	<i>Anna</i>	Wheat, <i>Shali chaval</i> (rice), <i>Mudaga</i> (Green Gram), <i>Yava</i> (Barely), <i>Lavka</i> , <i>Mayur-Harina</i> , <i>Titir Murga Maamsa</i> (Meat), <i>Karvellaka</i> (Bitter Gaud), <i>Patola</i> (pointed Gourd), <i>Sahijana</i> (Moringa), <i>Punarnava Shaka</i> , and <i>Sunishnika Shaka</i> are some of the other ingredients.
B	<i>Vihar</i> (Regime)		<i>Brahmacharya</i> (Celibacy), <i>atialpa bolana</i> (Less talkative)
C	<i>Aushadh</i> (Medicine)		<i>Rasayana sevana</i> (Antioxidant treatment)
D	<i>Upakrama</i> (Therapy)		<i>Nasya</i> (Nasal drops), <i>Dhumapana</i> (Medicated Smoke Inhalation), <i>Swedana</i> (medicated steam), <i>Virechana</i> (medicated purgation), <i>Vaman</i> (medicated emesis), and <i>Raktamokshana</i> (bloodletting).
<b>Apathya in Karna srava</b>			
A	<i>Ahar</i> (Diet)		
	1	<i>Drava</i>	---
	2	<i>Phala</i>	---
	3	<i>Anna</i>	<i>Viruddha anna evam pana ka sevana</i> (incompatible diet), <i>kapha karaka evam guru pa-dartho ka sevana</i>
B	<i>Vihar</i> (Regime)		<i>Vyayama</i> (Exercise), <i>Shirahsnana</i> (head-bath), <i>danta kashta</i> ,

		<i>sheeta vayu evam shitaljala ka sparsha</i>
--	--	---

**Table 4: Probable mode of action and Samprapti Vighatana:<sup>5</sup>**

<b>S.NO</b>	<b>Samprapti Ghatak</b>	<b>Karnasrava</b>	<b>Effect of Herbo-mineral Compound</b>
1	<i>Dosha</i>	<i>Vata-Kapha</i>	<i>Vata-Kapha shamak</i>
2	<i>Dushya</i>	<i>Rakta</i>	<i>Raktadoshahara</i>
3	<i>Agni</i>	<i>Jatharagni mandya</i>	<i>Deepan, pachan</i>
4	<i>Ama</i>	<i>Jatharagni mandya janya</i>	<i>Nirama</i>
5	<i>Srotas</i>	<i>Shabdavahi srotas</i>	<i>Shulaghna</i>
6	<i>Udbhavsthan</i>	<i>Amashayajanya</i>	<i>Vata-kaphashamak Raktaprasadkara, vranaropana</i>
7	<i>Sanchay sthan</i>	<i>Shrotovahi Sira</i>	<i>Vata-kaphashamak Raktaprasadkara, vranaropana</i>
8	<i>Adhisthan</i>	<i>Karna Pradesh</i>	<i>Vata-kapha shamak Raktaprasadkara, vranaropana</i>
9	<i>Vyakta sthan</i>	<i>Karna Pradesh</i>	<i>Vata-kapha shamak Raktaprasadkara, vranaropana</i>
10	<i>Dusti Prakar</i>	<i>Atipravriti</i>	<i>Vranaropan, Dhatupushtikara</i>
11	<i>Rogamarga</i>	<i>Madhyam</i>	<i>Vranaropana</i>
12	<i>Vyadhi svabhav</i>	<i>ati srava</i>	<i>Asrava</i>
13	<i>Sadhyasadhya</i>	<i>Kriccha sadhya</i>	<i>Sadhya</i>

## Follow up and Outcomes–

**Table 5:** Assessment of Classical signs and symptoms in each follow up -

S.NO	Symptoms	BT (Before Treatment)	AT (After- Treatment)	Follow up after 15 days	Follow up after one Month	Follow up after two month	Follow up after three month
<b>Subjective Parameters</b>							
1	Earache	1	1	1	1	0	0
2	Itching	2	1	1	0	0	0
3	Impaired hearing	1	1	1	1	1	0
<b>Objective Parameters</b>							
1	Discharge	1	0	0	0	0	0
2	Perforation	1	1	1	1	0	0
3	Pure tone audiometry	1	1	1	1	1	1

The assessment scale is suggestive of that improvement in the symptoms of discharge , itching , perforation and impaired hearing.

Audiometry report was having PTA Before treatment was 95 was reduced to 80 db after treatment suggestive of the improvement in the hearing loss with Average PTA difference of 15db.

## DISCUSSION

Karnasrava is attributed to the Vata Kapha dosha in Ayurveda classics. In this disease, kriyakalpa advised was karna pichu with Jatyadi Taila which primarily works on vrana (wound) in two ways, by doing shodhana and ropana, which aid in the appropriate wound healing. Similar to snehana, sodhana, ropana, etc., pichu's local action is based on the medicine's cellular absorption. Sitopaladi churna has a balancing and revitalizing impact on the vata and kapha

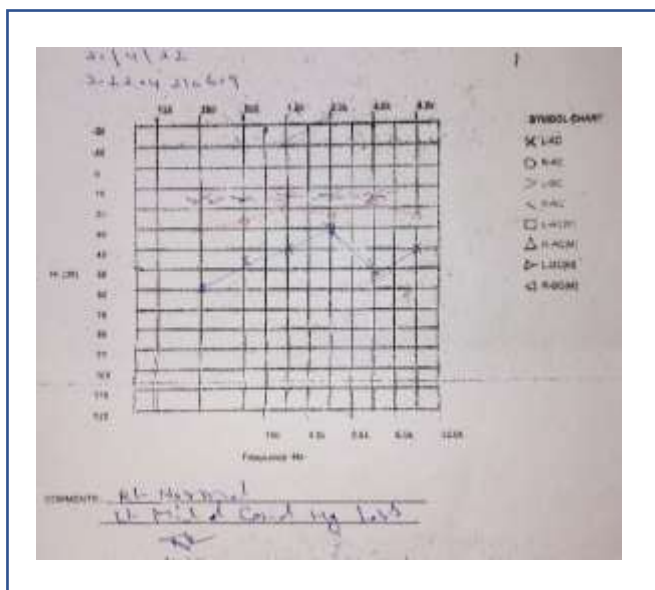


doshas. Godanti Bhasma possesses analgesic, antipyretic, and anti-inflammatory effects. Sarivadi vati is used in Ayurvedic treatment of ear problems such as tinnitus, hearing loss, ear infection, etc. Gokshuradi guggul has Vata shamak and Vedana sthapak properties. Most of its drugs have Ushna Guna and also due to presence of Guggul, reduces pain as it performs the action of Vedanasthapana. In current case patient got relieved with the ear discharge , pain and even got improvement in hearing after three months of the treatment.

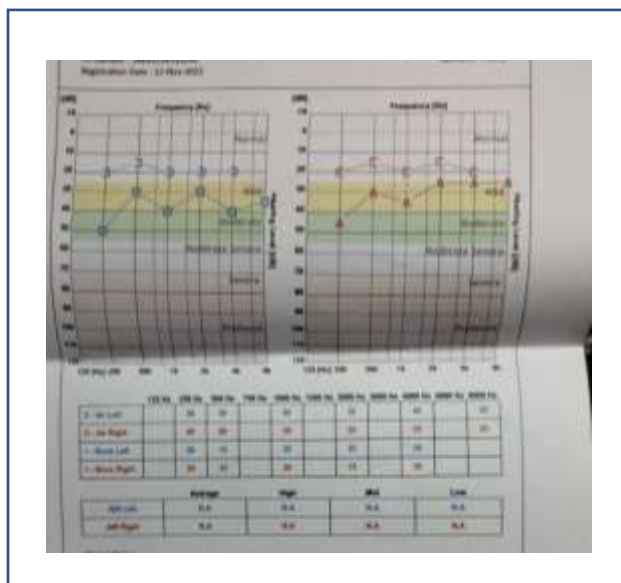
**CONCLUSION**

Karnasrava is compared to chronic suppurative otitis media of tubotympanic type. The precursor for this condition is Pratishyaya and it provides considerable relief in controlling the symptoms. In the present case study as mentioned above ear discharge, TM perforation, and hearing impairment were all significantly reduced. The repeated antibiotics prescribed in Allopathic science fail to provide complete cure and healing of Tympanic membrane, and at the same time causes unnecessary side effects. But Ayurvedic treatments and medications provide complete relief in symptoms as well as help in complete healing of tympanic membrane as well as provide better immunity and disease resistance. Pathya and apanya (dietary regimen) are also equally important while receiving treatment. The use of oral medications, topical medications, and Ayurvedic therapies manage CSOM better and can be easily practiced with long-lasting effect.

Before Treatment



After Treatment



---

**References :**

1. Acharya Yadavaji Trikamji, Editor. Ayurveda Dipika Commentary of Cakrapanidatta. Reprint ed. 3-5. Vol. 26. Varanasi, India: Chaukhamba Surbharati Prakashana. Agnivesha. Charaka Samhita- Chi., 2008.
2. Kaviraja Atridevagupta Asthangahridaya of Vagbhatta with Vidyotini hindi commentary, Uttartantra, reprint edition: Chapter 17, Verse 26, Varanasi: Chaukhamba Prakashan, 2009; 694
3. Sushruta Samhita, Ayurveda tattva Sandipika Hindi Commentary by Kaviraja Ambikadutta Shastri Uttartantra 20/3-5, Reprint edition, Chaukhambha Sanskrit Sansthana Varanasi, 2013; 111.
4. Dhingra PL, Dhingra S. Diseases of Ear, Nose and Throat-E-Book. Elsevier Health Sciences; 2013 Oct 10.
5. Tambekar DH, Dahikar SB, Dahikar S. Antibacterial potential of some herbal preparation: An alternative medicine in treatment of enteric bacterial infection. International Journal of Pharmacy and Pharmaceutical Sciences. 2010;2(4):176-9.
6. Sharma G, Yadav Y, Rani P, Kumar A. PHARMACEUTICAL AND ANALYTICAL STUDY OF SARIVADI VATI: AN HERBOMINERAL FORMULATION FOR KARNA ROGA. International Journal of Research in Ayurveda and Pharmacy. 2022;13(04):57-61
7. Sharma G, Yadav Y, Rani P, Kumar A. PHARMACEUTICAL AND ANALYTICAL STUDY OF SARIVADI VATI: AN HERBOMINERAL FORMULATION FOR KARNA ROGA. International Journal of Research in Ayurveda and Pharmacy. 2022;13(04):57-61
8. Heidari MR, Mehrabani M, Pardakhty A, Khazaeli P, Zahedi MJ, Yakhchali M, Vahedian M. The analgesic effect of Tribulus terrestris extract and comparison of gastric ulcerogenicity of the extract with indomethacine in animal experiments. Annals of the New York Academy of Sciences. 2007 Jan;1095(1):418-27.
9. Shoji N, Umeyama A, Saito N, Takemoto T, Kajiwara A, Ohizumi Y. Dehydropiperonaline, an amide possessing coronary vasodilating activity, isolated from Piper iongum L. Journal of pharmaceutical sciences. 1986 Dec 1;75(12):1188-9.

- 
10. Kaur R, Singh A. A Comparative Clinical Study of Gokshuradi Guggulu with Anupanabhedain The Management of Vatarakta with special reference to Gout, International Journal of Ayurvedic Medicine. 11(4): 664-671.
  11. KA S. Sushruta Samhita Ayurveda Tattva Sandipika Hindi commentary.