



MULTIMODAL AYURVEDIC MANAGEMENT OF KARNANADA (TINNITUS) ASSOCIATED WITH KARNABADHIRYA (HEARING LOSS): A CASE REPORT

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ABSTRACT

Karnanada (~tinnitus) and Karnabadhira (~hearing loss) are Karnagata Roga (~ear disorders) described in Salakya Tantra. Karnanada is associated with aggravated Vata dosa, whereas Karnabadhira occurs when Vata, alone or with Kapha, obstructs the pathways of auditory perception. Conventional management of tinnitus includes sound therapy, cognitive behavioral therapy, hearing aids and tinnitus retraining therapy. A 31-year-old woman presented with a three-month history of sudden-onset tinnitus, reduced hearing and fullness in the left ear. A multimodal Ayurvedic regimen was given: Snehapana, Virecana (~purgation), Marsa Nasya (~nasal instillation), Karnapurana (~ear filling), Karnadhupana (~ear fumigation), Niruha and Matra Basti (~enemas) and oral medicines. Tinnitus and ear fullness resolved and hearing-related symptoms improved subjectively, although audiometry showed persistent moderate left-sided loss (48 dB HL before, 44 dB HL after). No recurrence was reported at 1- and 6-month follow-up. This case suggests a possible role for individualized multimodal Ayurvedic management in the symptomatic relief of Karnanada with unilateral hearing impairment.

KEYWORDS : Ayurveda Treatment, Karnabadhira, Karnanada.

INTRODUCTION

Tinnitus affects about 14% of adults worldwide, and its prevalence rises with age. Around 20% of the global population has some degree of hearing loss. In Ayurveda the ear is a *Pañcendriya Adhisthana* (~seat of a sense organ), and *Srotendriya* (~hearing sense) arises from *Akasa mahabhuta* (~space element). *Akasa* and *Vayu* are essential for hearing, so *Vata dosa* governs normal auditory function. *Karnanada* is a predominantly *Vata* disorder and, if untreated, may lead to *Badhira*. Aggravated *Vata*, with *traits Ruksha* (~dry) and *Laghu* (~light) *Guna*, moves abnormally in the *Sabdavaha Srotasa* (~sound channels) and produces sounds like *Bheri* or *Mrdanga* (~drum), perceived as ringing, buzzing, hissing or whistling. In *Badhira*, *Vata*, alone or with *Kapha*, accumulates in the *Sabdavahi Sira* (~sound-carrying channels) and blocks them, causing hearing loss.

For *Karnaroga*, *Susruta* recommends *Ghrtapana*, *Rasayana*, *Karnapurana*, *Pratisyaya* treatment, *Snehana*, *Svedana* and *Vatavyadhi Cikitsa*.⁷ *Caraka* advise daily *Karnapurana* to prevent *Karnanada* and *Badhira*. On this basis, a multimodal protocol of *Sodhana*, *Nasya*, *Karnapurana*, *Karnadhupana* and *Basti*, with internal medicines of *Brhana* (~nourishing) and *Rasayana* (~rejuvenating) action, was used in the present case.

Patient Information

A 31-year-old woman presented to the *Salakya Tantra* outpatient department with sudden-onset ringing, reduced hearing and a sensation of fullness in the left ear for about three months. She had received no specific treatment and was admitted on 28 January 2025 for Ayurvedic management.

Clinical Findings

Pinnae and pre- and post-auricular areas were normal. Both canals were dry, without congestion. Both tympanic membranes were intact, without discharge or perforation, with absent cone of light and no movement. Tuning-fork tests showed Rinne's AC < BC (left), Weber lateralized to the left and reduced ABC (left). Pure-tone audiometry (PTA, 20 December 2024) showed asymmetric left-sided hearing loss (15 dB HL right, 48 dB HL left). Vitals were normal (BP 110/70 mmHg, pulse 78/min, respiratory rate 22/min, temperature

98.6°F); weight 68 kg, height 158 cm, hemoglobin 12.4 g%. Respiratory, cardiovascular and gastrointestinal examinations were normal.

Timeline and therapeutic intervention

Table 1. Timeline of the case, treatment and follow-up.

Period	Condition	Intervention
Nov 2024 – Jan 2025	Sudden onset of tinnitus, reduced hearing and left ear fullness	No specific treatment
28–30 Jan 2025	Persistent symptoms	Abhyantara Snehapana with Pañcatikta Ghrita, 40 ml rising to 330 ml twice daily with Usnodaka, until Samyaka Snigdha Lakṣaṇa
31 Jan – 2 Feb 2025	Symptoms persisted	Sarvanga Abhyanga with Narayana taila and Bāṣpa Svedana with Nirgundi patra for 3 days; on day 3, Virecana with Eranda Snehā 50 ml + Dinadayala Curna 5 g with Drakṣa kvatha
3–4 Feb 2025	Post-Virecana	Samsarjana Krama
4 Feb 2025	Mild improvement	Balamula kvatha 40 ml twice daily on empty stomach; Triphala Guggulu 2 tablets thrice daily with lukewarm water
4–23 Feb 2025	Marked improvement	Abhyanga, Svedana, Balamula kvatha and Triphala Guggulu continued; Marsa Nasya with Saddbindu taila 6 drops per nostril; Karnapurana with Narayana taila; Karnadhupana; Niruha Basti with Dasamula kvatha 320 ml and Matra Basti with Bala taila 40 ml after the evening meal, on alternate days

24 Feb 2025 (discharge)	Significant improvement	Advised diet; oral medicines continued
24 Mar 2025 (1-month follow-up)	No recurrence	Oral medicines at home; diet advised
25 Aug 2025 (6-month follow-up)	No recurrence	—

Diagnostic Assessment

Diagnosis rested on classical Ayurvedic features, ear examination, tuning-fork tests, PTA and the Tinnitus Functional Index (TFI). Tinnitus severity (TFI score, 0–100) and hearing loss (WHO grades of PTA average at 0.5, 1, 2 and 4 kHz)ⁱⁱ were graded using Table 2. The pre-treatment audiogram showed marked asymmetric left-sided impairment, with relatively preserved low-frequency thresholds and a steep decline across the mid and high frequencies. After treatment, audiometry showed persistent moderate left-sided impairment. As the follow-up audiogram lacked a complete bone-conduction dataset, the loss is reported conservatively as asymmetric unilateral left-sided hearing loss, without a definitive conductive, sensorineural or mixed label.

Table 2. Criteria for Assessment of Tinnitus (TFI) and Hearing Loss (WHO grades).

Scale	Severity level	Score / threshold	Description
TFI (tinnitus)	Not a problem	0–17	Absent or occasional
	Small problem	18–31	Occasional; no daily impact
	Moderate problem	32–53	Frequent; may disturb sleep
	Big problem	54–72	Constant; impairs tasks and sleep
	Very big problem	73–100	Severe daily disruption
WHO grade (hearing loss, dB HL)	Normal	<20	None
	Mild	20–34.9	Some conversational difficulty
	Moderate	35–49.9	Difficulty with normal voice
	Moderately severe	50–64.9	Hears loud speech only
	Severe	65–79.9	Loud speech near ear only
	Profound	80–94.9	Extreme difficulty
	Complete / total	≥95	Cannot hear speech
	Unilateral	Better ear <20; worse ear ≥35	Poorer-ear difficulty

Dietary Advice

Advised: boiled gourds (ridge, sponge, bottle, pointed, ash, bitter), pumpkin, spinach, drumstick, *Mudga* (green gram) and its soup; *Sali* rice; cow ghee and milk; lukewarm water; pomegranate, sweet apple and puffed rice; vegetables cooked in cow ghee. Avoided: chillies, oily food, bakery items, fermented foods, pickles, cold drinks, tomato, lemon, curd, buttermilk, excess salt and junk food.

Observation and Outcome

Treatment was well tolerated, with no discontinuation, complications or adverse reactions. During *Snehapana*, attainment of *Samyaka Snigdha Laksana* was assessed daily through *Sneha Jiryamana* and *Jirna Laksana*. After *Abhyanga* and *Svedana* as *Purvakarma*, *Virecana* produced satisfactory

purgation of about 21 Vegas. During *Niruha Basti*, *Basti Pratyagamana kala* was about 15–20 minutes, indicating *Vata Samana*. *Karnapurana* and *Nasya* were given as local (*Sthanika*) therapy, useful in *Urdhvajatrugata roga*. Outcomes are summarized in Table 3.

Table 3. Clinical and Audiometric Outcomes.

Outcome	Before treatment (28/ 01/ 2025)	At discharge (24/ 02/ 2025)	1st follow-up (24/ 03/ 2025)	2nd follow-up (25/ 08/ 2025)
Tinnitus (subjective)	Present	Significant im-provement	No recurrence	No recurrence
Hearing difficulty (subjective)	Present	Significant im-provement	No recurrence	No recurrence
Ear fullness	Present	Absent	Absent	Absent
Pure-tone audiometry	Marked asymmetric left-sided impairment	Persistent moderate left-sided impairment	—	—
Tinnitus severity (TFI level)	Moderate problem	Not a problem	Not a problem	Not a problem
TFI score (0–100)	34	15	15	15
Left ear, dB HL	48 (PTA 20 Dec 2024)	44 (PTA 26 Feb 2025)	—	—
Right ear, dB HL	15 (normal)	14 (normal)	—	—
WHO grade, left ear	Moderate	Moderate	—	—

DISCUSSION

Karnanada is an ear disorder described in Ayurveda, also noted as a symptom in other conditions, and is mainly caused by *Vata*. *Snehana*, particularly *Brmhana* and *Bahya Snehana* such as *Karnapurana*, is considered the ideal treatment. *Badhira* among the 80 *Vataja Nanatmaja Vyadhi*, and its *samprapti* involves *Kaphavrtta Vata*. *Snehana*, *Svedana* and *Sneha Virecana* for *Karnanada* and *Karnabadhira*, and *Vataghna Cikitsa* described in classics. The treatment here followed these principles.

Karnapurana is prescribed in *Dinacarya* to prevent ear disorders. *Snehana* and *Svedana* before *Karnapurana* improve circulation and drug absorption. *Narayana taila* was used for its *Vatasamana* action. *Virecana* was given to purify the body and expel *Vata* and *Kapha*, using *Eranda Sneha* and *Dinadayala Curna*, which have *Agnivardhaka*, *Bhedaka* and *Srotosodhaka* properties. *Nasya* acts well in *Urdhvajatrugata vikara*, and *sodhana Nasya* brings about *Srotosodhana*; *Sadbindu taila* was chosen for *Kapha Sodhana* because of its *Tiksnata*. *Taila* is *Snigdha*, *Guru*, *Slaksna* and *Usna*, opposite to the *Ruksa*, *Laghu* and *Khara* qualities of *Vata*, and is therefore regarded as the best *Vata*-pacifying medicament. Processed with *Vatahara* drugs and given by several routes, it acts more effectively. *Bala taila* was given here as *Matra Basti*. *Balamula kvatha* was given for its *Balya* action. *Basti* is the prime treatment for *Vata* and regarded by some as a complete therapy. *Caraka* states that *Basti*, introduced into the colon, acts on the whole body and draws out impurities, as the sun draws moisture from the earth. *Niruha Basti* with *Dasamala kvatha* promotes *Agni* and regulates *Vata*, while *Matra Basti* with *Bala taila* pacifies *Vata*.

This is a single case, and the audiometric change (48 to 44 dB HL) is small, so benefit cannot be attributed to treatment with certainty; improvement is mainly subjective.

CONCLUSION

In this case, individualized multimodal Ayurvedic management was associated with sustained resolution of tinnitus and subjective improvement in hearing-related symptoms during follow-up.

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