



A SINGLE CASE STUDY ON AYURVEDIC MANAGEMENT OF KARNANAADA (TINNITUS)

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ABSTRACT

Ayurveda focuses on maintaining health and treating ailments. The sense organs are the most vital organs in the body. The senses are known as Indriya in Ayurveda. Numerous safety precautions to maintain ear health are recommended by several Acharyas. There were several therapy options available to treat ailments even then. One of the ear ailments is Karnanaada. One of its symptoms is the ability to hear noises like bheri, mridanga, etc. Karnanaada is ver much similar with Tinnitus. According to epidemiological data, this condition affects 38% of those under 40 and 68% of people over 40. Tinnitus is a serious condition that can even be fatal. By affecting hearing loss, restless sleep, and irritability, it lowers quality of life (QoL). The patient in this case study displayed tinnitus symptoms. By adopting Snehana and Brihmana Chikitsa, he is cured. With this therapy, the patient's tinnitus was reduced by 70%.

KEYWORDS- Karnanaada, Tinnitus, Hear noises, etc.

INTRODUCTION

A karna-roga is studied under Urdhwa Jatru-gata Vikara is Karnanaada. The words "Nada" describe something that causes the ear to hear rhythmic noises.¹ The vitiated Vata dosha in Shabdavaha either penetrates other srotas or is surrounded by the Kapha dosha. Karnanaada is the method by which Srotas produces different noises in the ears, such Bheri, Mrudanga, Shankha, etc.² The polluted Vayu gets caught in the Shabdavaha Srotas and causes the different sounds in the ear that are referred to as Karnanaada.³

The following are the aetiological factors that lead to the development of the Karnanaada: Pratishyaya (Rhinitis), Avashyaya (Exposure to cold wind currents), Jalakreeda (Swimming), Karna Kanduyana (constant rubbing or irritating the ear with finger or any other instruments), Mithya yoga of the Shastra (improper usage of instrument for diagnosis and treatment on Vata is one of the three doshas that is thought to be a crucial factor in the development of Karnanaada).

CLINICAL FEATURE-

Karnanaada is a distinct illness. It can also be found in other disorders' As Lakshana. No Poorvarooopa for Karnanaada has been explained, however it is a Poorvarooopa of numerous Roga, such as Apasmara, Vataja Unmada, and Grahini.

ROOPA

Nanavidha Shabdan - Different sorts of sounds heard in Shabdavaha Srotas. Vividhaan shabda like Bheri, Mrudanga, Shankha, Bhrungaara, Kauncha, Mandoora, Tantri, and Saamturyasvanam are heard in Shabdavaha Srotas. According to Acharya Haritha, several doshas can contribute to karnanaada, and the noises that result from the illness depend on which dosha is present. Pitta dosha is responsible for noises like burning flute. If one hears thunder, Kapha dosha is to blame.⁴ It has also been described as the lakshana of several illnesses, including Vataja jwara, Vataja arsha, Pandu, Krimija Shiroroga, and Sannipataja jwara.

SAMPRAPTI

According to Nidana, Hetus causes Vata to become vitiated. The Shabda vaha Srotas become the residence of Vata. It results in Karnanaada and the perception of various sounds.

TINNITUS

Tinnitus is the perception of any sound that arises unilaterally or bilaterally out of nowhere and is unrelated to any external auditory or electrical stimuli.⁵ Such a perceived sound might be anything from a soft background noise to a sound that can be heard over loud outside noises.⁶ It impairs quality of life and causes a variety of physical problems as well as emotional anguish, cognitive anxiety, intrusiveness, auditory and perceptual impairments, and sleep disruptions. With or without hearing loss, the symptoms might be unilateral or bilateral and sound like ringing, hissing, whistling, humming, buzzing, chirping, or clicking noises.⁷

CLINICAL FEATURES

There are two types of the tinnitus i.e. Subjective and Objectives types Tinnitus. Tinnitus patients may hear phantom sounds in one ear, in both ears, and in your head. The phantom sound may ring, buzz, roar, whistle, hum, click, hiss, or squeal. The sound may be soft or loud and may be low or high pitched. Ghritapana (the use of ghee), Rasayana (rejuvenation), Avyayama (no exercise), are the primary therapeutic modalities for Karna Roga.

Case report

Age – 27 years

Occupation – Student

Gender - Male

Religion – Hindu

Consulted - Shalaky Tantra OPD of Sri Krishna AYUSH University, Kurukshetra, Haryana.

Chief complaints

Ringling and whistle noise since 2015. First starts in left ear then in 2019 starts in Rt. Ear. He was found to be having tinnitus & deafness and treated by Karnapoorana with Bilvadi Taila with oral medicine. He had procedure done only for 7 days & now is getting relief & is being discharged with following medicine.

History of present illness

The subject was apparently normal 6 years ago. Then she gradually developed ringing sound in the left ear for 6 years. Later she noticed reduced hearing in left ear from past 3 months associated with reduced sleep. She approached allopathic doctor, there ear drops were given still she didn't find any relief and with all these complaints she approached the Shalaky Tantra OPD to get Ayurvedic Treatment.

History of past illness

No history of Nasal allergy. Not a known case of DM and Hypertension.

Personal history

Appetite- normal

Bowel - normal

Urine - normal

Sleep - normal

Vitals

- Respiratory rate: 20/min
- Regular temperature: 98.6F
- Blood pressure: 120/80 mm of Hg
- Pulse: 75/min

Physical examination

- Pallor - No pallor
- Lymphadenopathy - No lymphadenopathy

Ashtavidha Pareeksha

- Nadi: 75/min
- Mutra: 3-4 times/day
- Mala: Prakruta
- Jihwa: Nirama
- Shabda: Prakruta
- Sparsha: Prakruta
- Drik: Prakruta
- Akriti: Madhyama

Systemic examination

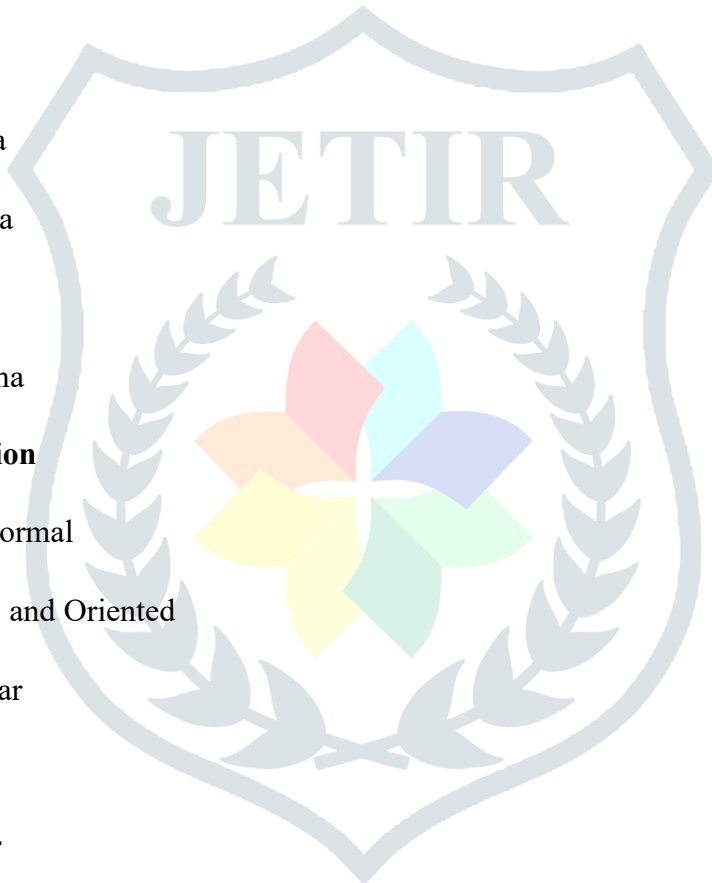
- CVS – S1, S2-Normal
- CNS- Conscious and Oriented
- RS- AEBE - Clear
- GIT- Normal

Examination of ear

- Pinna – Normal
- Pre and post-aural area - Normal
- External auditory canals - Normal
- Tympanic membranes – No discharge, no perforation, bilateral TM is intact
- The oral cavity proper, Larynx and Nose - Normal

Qualitative test for hearing by tuning fork

- Rt. Ear – Hearing sensitivity within Normal Limit
- Lt. Ear -Mild sensitivity with high frequency hearing



Diagnosis – Karnanaad and Karna-Badhirya**Treatment modalities**

- *Karnapoorana – with Bilvadi Taila 3 drops TDS, after proper Snehana to pinna and surrounding areas of ear for 15days.*
- *Dashamularishta + Aswagandhaarishta – 30 ml -0 – 30 ml BD for 15days*
- *Sarivadi Vati – 2 BD after food with Go-Dugdha for for 15days*
- *Cap. Ksheerabala- 1 BD for 15days*
- *Anu Taila – Pratimarsha Nashya for 15days*
- *Jivantyadi Choorna- 5 gm BD with milk for 15days*
- *Cap. Palsineuron – 1-0-1 for 15 days*

Sl. No.	Date	Karma	Karma Time	Dravya	Nirgamana Duration	Remark
1.	24-8-22	Karna Poorana	12.15 pm	Bilva Taila	15 min	Samyak Yoga
2.	25-8-22	Karna Poorana	11.30 am	Bilva Taila	15 min	Samyak Yoga
3.	26-8-22	Karna Poorana	11.15 am	Bilva Taila	15 min	Samyak Yoga
4.	27-8-22	Karna Poorana	11.50 am	Bilva Taila	15 min	Samyak Yoga
5.	28-8-22	Karna Poorana	11.40 am	Bilva Taila	15 min	Samyak Yoga
6.	29-8-22	Karna Poorana	11.00 am	Bilva Taila	15 min	Samyak Yoga
7.	30-8-22	Karna Poorana	11.00 am	Bilva Taila	15 min	Samyak Yoga

FOLLOW -UP

Sl. No.	Date	Chief Complaint /Follow- up	Treatment
1.	23-8-22	<p>C/O</p> <ul style="list-style-type: none"> • Ringing & Blezzing noise sinch 2015 • First Start in Lt. ear in 2019 then start in Rt. Ear <p>N/H/O -DM Type II/ HTN/ Typhoid</p> <ul style="list-style-type: none"> • G/H -Appetite – Normal • Bowel – Normal • Urine -Normal • Sleep -Normal <p>PTA REPORT ANALYSIS Rt. Ear- Hearing sensitivity within Normal Limit Lt. Ear -Mild Sensorineural with high frequency hearing</p>	<p>Rx</p> <ul style="list-style-type: none"> ➤ Karnapoorana with Bilwadi Taila 3-3-3 (3 drops TDS) -15 days ➤ Dashamularishta + Ashwagnadhrishta -30 ml -0 -30 ml (30 BD) -15 days ➤ Sarivadi Vati with Go- Dugdha -2 -0-2 (2 BD) -15 days ➤ Cap. Ksheera Bala – 1-0-1 (1 BD) -15 days ➤ Cap. Palsineuron 1-0-1 (1 BD) -15 days ➤ Anu Taila Pratimarsha Nashya -Local Application (L/A) -15 days ➤ Jivantyadi Choorna -5 gm-0-5gm (5gm BD) with Go-Dugdha -15 days
2.	24-8-22 At 9.30am	<p>C/O</p> <ul style="list-style-type: none"> • Patient general condition stable • No fresh complaints • Vitals Stable 	<p>Advice – CST for 1 day</p>
3.	25-8-22 At 9.45am	<p>C/O</p> <ul style="list-style-type: none"> • Patient general condition stable • No fresh complaints • Vitals Stable 	<p>Advice – CST for 1 day</p>
4.	26-8-22 At 10.00am	<p>C/O</p> <ul style="list-style-type: none"> • Patient general condition stable • No fresh complaints • Vitals Stable 	<p>Advice – CST for 1 day</p>
5.	27-8-22 At 10.00am	<p>C/O</p> <ul style="list-style-type: none"> • Patient general condition stable • No fresh complaints 	<p>Advice – CST for 1 day</p>

		<ul style="list-style-type: none"> • Vitals Stable 	
6.	28-8-22 At 9.45am	C/O <ul style="list-style-type: none"> • Patient general condition stable • No fresh complaints • Vitals Stable P/A -NAD	Advice – CST for 1 day
7.	29-8-22 At 9.45am	C/O <ul style="list-style-type: none"> • Patient general condition stable • No fresh complaints • Vitals Stable P/A -NAD	Advice – CST for 1 day
8.	30-8-22 At 9.15am	C/O <ul style="list-style-type: none"> • Patient general condition stable • No fresh complaints • Vitals Stable P/A -NAD	Advice – CST for 1 day

RESULTS

After 8 days of Nasya and 7 days of Karnapoorana, the patient started to experience symptom alleviation. At the time of release, the tinnitus had diminished by three weeks and there had been a subjective improvement in hearing. The patient's hearing improved, notably during phone conversations, and his tinnitus diminished (it was only sometimes detectable, and only in extremely quiet environments). He also started getting better sleep. After receiving follow-up care for three months, the patient's hearing and tinnitus both significantly improved. During the follow-up period, his internal medications, barring tablets, were also continued.

Pathya (Do's) - Suggested to consume a light, warm, and easily digested meal and to give the sense organs enough rest.

Don'ts for Apathya- include not exercising, taking a head wash, talking too loudly, drinking cold water, and being exposed to chilly winds.

AUDIOLOGICAL EVALUATION

01/12/2015

SPEECH AUDIOMETRY	PTA	SRT	DS
RT. EAR	13dB	dB	%
LT. EAR	87 dB	dB	%

AUDIOLOGICAL DIAGNOSIS**RT EAR** -Normal hearing with mild dip at 4 KHZ only**LT EAR** -Sloping Sensorineural (SN) hearing**ADVICE –**

- Care of Rt. Ear
- ENT consultation
- Precaution chart already done

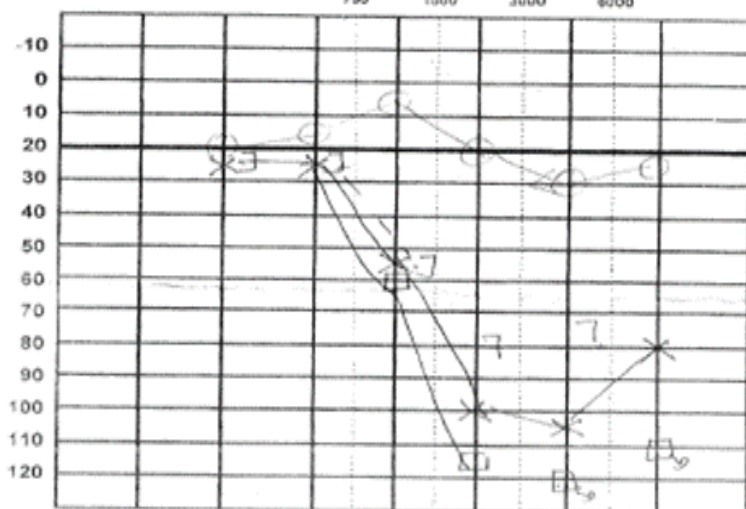


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CHANDIGARH
SPEECH & HEARING REHABILITATION UNIT
DEPARTMENT OF ENT
HEARING EVALUATION**



ME: Louisa kumar AGE/SEX: 21/M. DATE: 01/12/2015
 R No: 150806843 AUDIOGRAM No: 154101
 DIOMETER: Lab B TESTED BY: [Signature]
 REFERRED BY: _____ CLINICAL DIAGNOSIS: _____

Lpr E
 FREQUENCY IN HERTZ (Hz)
 125 250 500 1000 2000 4000 8000
 750 1500 3000 6000



Right		Left
T.M. :	<input type="radio"/>	<input type="radio"/>
Rinne :	<input type="radio"/>	<input type="radio"/>
Weber :	<input type="radio"/>	<input type="radio"/>
ABC :	<input type="radio"/>	<input type="radio"/>

RIGHT (RED)	AUDIOGRAM KEY	LEFT (BLUE)
<input type="radio"/>	Air Conduction Unmasked	<input type="radio"/>
<input type="triangle"/>	Air Conduction Masked	<input type="triangle"/>
<input type="square"/>	No Response Unmasked	<input type="square"/>
<input type="circle"/>	No Response Masked	<input type="circle"/>
<input type="star"/>	Bone Conduction Unmasked	<input type="star"/>
<input type="diamond"/>	Bone Conduction Masked	<input type="diamond"/>
<input type="x"/>	No Response Unmasked	<input type="x"/>
<input type="y"/>	No Response Masked	<input type="y"/>
<input type="z"/>	No Response Unmasked	<input type="z"/>
<input type="v"/>	No Response Masked	<input type="v"/>

Sound Field - S

AUDIOGRAM

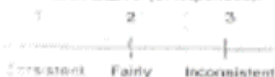
SPEECH AUDIOMETRY	PTA	SRT	DS
Right ear	13 dB	dB	%
Left ear	27 dB	dB	%

IMPEDANCE AUDIOMETRY	Tympanogram	Reflex
Right ear		
Left ear		

AUDIOLOGICAL DIAGNOSIS:-

Ⓡ : Normal hg ± mild dip at 4kHz only.
 Ⓛ : Sloping SN hg lon.

RELIABILITY (of responses):



[Signature]
 AUDIOLOGIST 01/12/2015

12/FEB/2020 –

• **Table 1-TEST CONDITION**

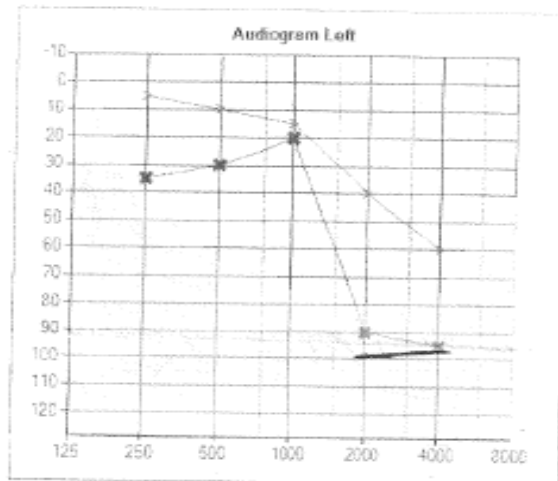
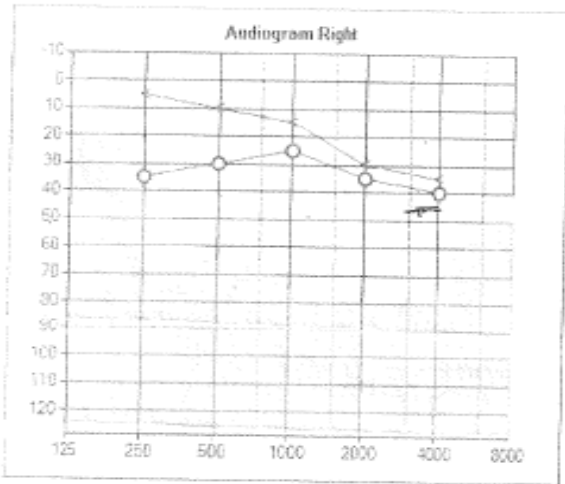
	250HZ	500HZ	1KHZ	2KHZ	4KHZ	6KHZ	8KHZ
L. AC HTL	35	30	20	90	95		
L. BC HTL	5	10	15	40	60		

- **AUDIOLOGICAL INTERPRETATION**
- Moderate conductive high frequency Hearing loss

VIRK HOSPITAL

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 KURUKSHETRA, HARYANA, INDIA, 136118
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 Email: virkhospitalkk@gmail.com Web: Web

Id: 20778		Name: gourav	
Date of Birth: 12/Feb/20		Gender: Male	



	250Hz	500Hz	1kHz	2kHz	4kHz	6kHz	8kHz
L - AC HTL	35	30	20	90	95	-	-
L - BC HTL	5	10	15	30	60	-	-
Loss:	<input type="checkbox"/> Conductive <input type="checkbox"/> Sensorineural <input type="checkbox"/> Mixed						

Right	Audio Key	Left
○	AC - HTL	X
●	AC - MCL	M
□	AC - UCL	m
△	BC - HTL	-
◇	FF - HTL	S

Special Test

	500Hz	1kHz	2kHz	4kHz
SISI				
ABLB				

	Right	Left
SRT		
SDS		
UCL		

Audiological Interpretation

Ear: Moderate conductive High frequency Hearing left
 Recommendation: _____

23/12/2022 -

TUNNING FORK

RE LE

Rinne - +VE +VE

Weber -

PROVISIONAL DIAGNOSIS

Right Ear – Hearing sensitivity within **normal limit**

Left Ear – Mild complaint with Sensorineural complaint



OM SPEECH & HEARING CLINIC

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99919-09685

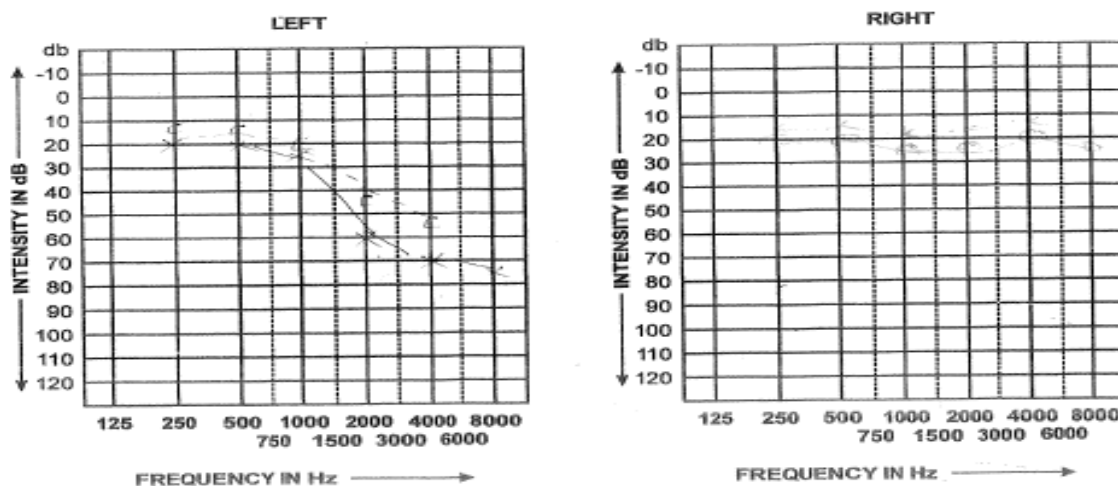
Email : omshclinic@gmail.com

Name Garima Kumar Dated 23/10/22 Age 27y Sex M

Referred by _____

Reliability _____

AUDIOGRAM



	Rt. Ear	Lt. Ear
PTA		

WEBER R [^] L
In voice 2 sec

TEST	Rt. Ear	Lt. Ear
AIR CONDUCTIONS		
AIR MASKED		
NO RESPONSE		
BONE CONDUCTION		
BONE MASKED		

Provisional Diagnosis :-

*3/4 Ear Mild Conductive
Hearing & the SN component.
Rt Ear normal hearing*

[Signature]
Audiologist

04/10/2022 – Reduced hearing sensitivity in Left ears

Table 1-TEST CONDITION

	PTA	SRT	SIS	MCL	UCL
RE	16.66 dB	dB	%	dB	dB
LE	36.66 dB	dB	%	dB	dB

TUNNING FORK

	RE	LE
Rinne –	+VE	+VE

Weber -

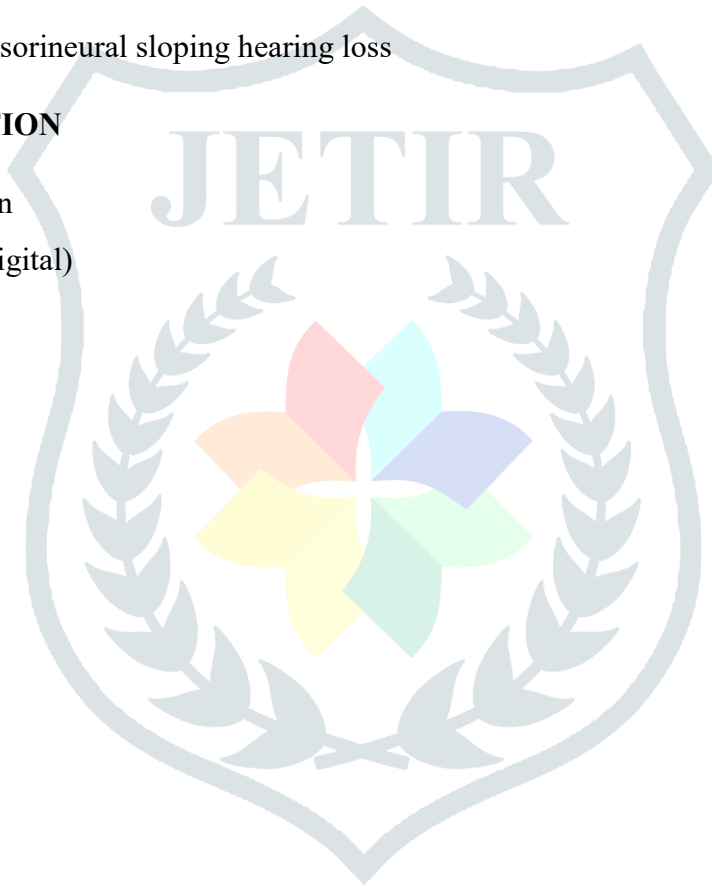
PROVISIONAL DIAGNOSIS

Right Ear – Hearing sensitivity within **normal limit**

Left Ear – Mild sensorineural sloping hearing loss

RECOMMENDATION

- ENT consultation
- Try Aid Trial (Digital)
- Aural Hygiene
- Follow- up



1AI SHREE RAM SPEECH AND HEARING CENTER

Special Test

Test Name	SISI	TDT	STAT
RE	500		
	1K		
	2K		
LE	500		
	1K		
	2K		

TUNNING FORK TEST :

Rinne - RE +ve - LE +ve
 Weber -

PROVISIONAL DIAGNOSIS :

Right Ear - Hearing sensitivity within @ limits.
 Left Ear - Mild Sensorineural sloping hearing loss

RECOMMENDATIONS

- Hg Aid Trial (Digital)
- ENT Consultation
- Aural hygiene
- Follow up



AUDIOLOGIST
 BRIJNANDAN MISHRA
 Audiologist
 CRR No. A71020

03/MAY/2023 – Reduced hearing sensitivity in both ears

Table 1-TEST CONDITION

	PTA	SRT	SIS	MCL	UCL
RE	16.66 dB	dB	%	dB	dB
LE	33.33 dB	dB	%	dB	dB

TUNNING FORK

RE **LE**
Rinne – +VE +VE
Weber -

PROVISIONAL DIAGNOSIS

Right Ear – Hearing sensitivity within **normal** limit

Left Ear – Mild sensorineural with **high** frequency hearing loss

RECOMMENDATION

- ENT consultation
- Try Aid Trial
- Aural Hygiene
- Follow- up

141 SHREE RAM SPEECH AND HEARING CENTER

Special Test

Test Name		SISI	TDT	STAT
RE	500			
	1K			
	2K			
LE	500			
	1K			
	2K			

TUNNING FORK TEST :

	RE	LE
Rinne -	+ve	+ve
Weber -		

PROVISIONAL DIAGNOSIS :

Right Ear - hearing sensitivity within @ limits
 Left Ear - Mild sensorineural with high frequency hearing loss

RECOMMENDATIONS

- ENT Consultation
- Hly Aid Trial
- Aural hygiene
- Follow up

BRUNANDAN MISHRA
 Audiologist
 CRR No. A71020



AUDIOLOGIST



DISCUSSION

In the science of Ayurveda, disease prevention is given more significance than simply treating existing illnesses. An illness called Karnanaad is brought on by vitiated vata. There are several reasons listed that contribute to the development of illness. The science of Ayurveda places greater importance on preventing

disease than it does on curing symptoms. Vitiating vata causes a condition known as Karnanaad.⁸ There are a number of factors described that influence the onset of sickness. As three particular Hetus for Karnanaada, Jalakreeda, Karnakandu, and Mithya Yoga of Shastra. Additionally at fault are Ratrijagarana, Ati-Vyayama, Pramitashana, and others.⁹ Poor nutrition causes Dhatukshaya, which ultimately causes Vata Prakopa, which causes Karnanaada when Vata enters the Shabdavaha Srotas. The patient hears Bheri, Mridanga, and other sounds.

The similarities between the clinical symptoms of tinnitus and Karnanaada suggest a possible connection. An ear-ringing or tapping noise is a symptom of tinnitus. Numerous conditions, such as stress, loud noise, hypertension, poor nutrition, insufficient sleep, decreased immunity, etc., can cause tinnitus. Although there is no complete cure for the disorder Karnanaada, its symptoms can be controlled with a range of procedures and drugs.¹⁰ Prior to treating the ailment, it is crucial to consider about implementing preventative measures. It's important to motivate patients to lead healthy lifestyles, including a good diet and enough sleep. The root cause must be addressed first. In Ayurveda, patients may receive treatment using a variety of methods and drugs. Because of its significant effects on Vata dosha, Snehana karma is regarded as the best cure for Vataja diseases like Karnanaada.

MODE OF ACTION

Ksheerabala, which is regarded as the greatest Rasayana and is claimed to have the qualities of Indriya prasada, Jeevan, and Brimhana. Additionally, on a regular basis will assist in achieving dridha indriya and longevity.¹¹

Karnapoorana- performs the Vatashamaka and improves the ability of normal hearing. According to Vagbhata and Yogaratnakara, who also considered the mixed character of deafness, sarshapataila was utilized for the Karnapoorana. Sarshapataila demonstrates teeksha guna, Ushna Veerya, and kapha vata hara action.¹²

Treatment Karnapoorana was administered along-side

- **Bilwa Taila:** Karnapoorana, three courses, for seven days in each ear, with a three-day break between each
- **Poorva Karma (Pre-operative procedure):** At this stage, Mrudu Abhyanga is performed using hot fomentation and tila taila on the post-auricular region and lateral surface of the face.
- **Pradhana Karma** In this step, Bilwa Taila is heated to a lukewarm temperature and lukewarm oil is poured into the external auditory canal for up to 10 minutes (100 matrakala).
- **Doses-** 10-12 drops in each canal.

Ashwagandha - Because Ashwagandha (Rasayana, Balya, and Brumhana) is a health tonic, it can stop the inner ear's deteriorating effects of aging. It is employed as an adaptogen, a chemical that is thought to improve the body's capacity to withstand various kinds of stress. Similar to other adaptogens, Ashwagandha is said to boost immunity, balance cholesterol levels, and enhance a specific organ (the cochlea and hearing capabilities). All of these qualities work to increase the inner ear's blood flow and lessen the patient's tinnitus' sharpness.

Bilwa Taila - Property owned by Vata Kaphahara belongs to Bilwa Taila. It is referenced in every traditional Ayurvedic literature. In order to maintain good hearing and balance function, it is theorized that Bilwa Taila aids in the absorption via the epithelial tissue of the external ear canal and tympanic membrane. Drug diffusion via (Rasa & Rakta) Shabdavaha Sira into deeper tissues. "Kedarakulya Nyaya" claims that Karnapoorana may enhance the blood flow to the ear initially. Due to the effects of Karnapoorana, Kapha and Vatashamana may rectify the microcirculation, keeping the ability to hear normally and alleviating ear pain (Karnanada).

CONCLUSION

This study unequivocally demonstrates that tinnitus and hearing impairment would significantly improve with the conventional line of therapy, and there were no side effects during the course of the treatment. As a result, the goal of this research is to present a management plan for psychologically bothersome tinnitus that is helpful in symptom alleviation and also improves quality of life.

CONFLICT OF INTEREST -NIL

SOURCE OF SUPPORT -NONE

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