



## Ayurvedic Management of Sensory Neural Hearing Loss- A Case Study

Akash Parashar<sup>1</sup>, S.M Pasha<sup>2</sup>

1. PG Scholar, Dept. of P.G studies in Shalaky Tantra, G.A.M.C, Bengaluru
2. Head of department, Dept. of P.G studies in Shalaky Tantra, G.A.M.C, Bengaluru

### Article Info

#### Article history:

Received on: 03-07-2022

Accepted on: 23-08-2022

Available online: 31-08-2022

#### Corresponding author-

Akash Parashar, PG Scholar, Dept. of P.G studies in Shalaky Tantra, G.A.M.C, Bengaluru.

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

### ABSTRACT:

**Introduction:** Sensory neural hearing loss occurs when there is damage to tiny hair cells in the cochlear or the auditory nerve. It is characterized by Sudden or steady loss of hearing, Muffled hearing, Difficulty for understanding speech, Ear fullness, Tinnitus and dizziness. According to WHO It is considered the main type of Deafness, which also affects the quality of daily life. In contemporary medicine there is no ideal cure for it, except the application of hearing aid and surgical intervention. In Ayurveda we can correlate it with *Badhirya* and treat according to it. Thus there is a need to develop an Ayurvedic treatment protocol which is effective and economically viable.

**Methods:** A 34- year old male adult approached OPD of SJIIM Bengaluru, complaining of decreased hearing in both the ears along with tinnitus since 1and a half months. He was taken in for treatment after assessment.

**Result:** After 4 months of treatment, Subjective parameters improved. **Conclusion:** By the above case study we can conclude that Ayurveda will have a pivotal role in treating cases of Sensory neural hearing loss and in return improving the quality of life.

**Keywords:** Ayurveda, Sensory neural hearing loss, *Badhirya*, *Sarivadi Vati*, *Rasayana Chikitsa*

### INTRODUCTION

Sensory neural hearing loss or SNHL happens after inner ear damage. Problems with the nerve pathways from your inner ear to your brain can also cause SNHL. Soft sounds may be hard to hear. Even louder sounds may be unclear or may sound muffled. This is the most common type of permanent hearing loss. Most of the time, medicine or surgery cannot fix SNHL. Hearing aids may help you hear<sup>1</sup>. SNHL can range from mild hearing loss to complete hearing loss depending on the degree of damage

1- Mild hearing loss: A loss of hearing between 26 to 40 decibels.

2- Moderate hearing loss: A loss of hearing between 41 to 55 decibels.

3- Severe hearing loss: A loss of hearing more than 71 decibels.

SNHL isn't a life-threatening condition, but it can interfere with your ability to communicate if not properly managed<sup>2</sup>. There are several pathophysiological mechanisms by which damage to the inner ear results in SNHL, Such as trauma, noise trauma, ototoxicity, diabetes, autoimmune pathology, congenital conditions and intake of Aminoglycoside antibiotics. It is characterized by



symptoms such as Sudden or steady loss of hearing, Ear fullness, Tinnitus<sup>3</sup>.

\Over 5% of the world’s population or 430 million people require rehabilitation to address their disabling hearing loss (432 million adults and 34 million children). It is estimated that by 2050 over 700 million people or one in every ten people will have disabling hearing loss<sup>4</sup>. Thus an Ayurvedic treatment protocol which is easily feasible, economically viable and effective is the need of the hour. Thus here we can correlate this condition with *Badhirya*, Which is caused by *Sangatva* of *Shabdhavaha srotas* by *Kapha* and *Vata Dosha*’s, which is aggravated by the unhealthy habits and lifestyle of the individual. It is treated by *Vata hara chikitsa* and treatments mentioned under *Prathishyaya*<sup>5</sup> and in later stages by Rejuvenating *Rasayana* therapies. Thus here we have tried to implement an Ayurvedic diet and treatment regimen, by which there can be an improvement in the diseased condition.

## MATERIAL & METHODS

**History of present Illness:** Patient was apparently normal before 1 month; gradually he started experiencing the ringing type of sound in both the ears along with difficulty in hearing. Thus he approached an ENT physician and he was advised to undergo surgical intervention, but he was not willing to the treatment and he wanted to try Ayurveda thus he approached our OPD.

**History of Past illness:** No known complaints of DM/HTN.

**Family History:** Nothing Specific

**Personal History:** Appetite: Good

Sleep: Sound

Bowel: Once a day

Micturition: 4-6 times a day

Diet: Mixed

**Ashtha Stana Pareeksha:** as quoted by Yogaratnakara<sup>6</sup>

1. *Nadi:* 70min
2. *Mutra:* 4-5times/day
3. *Mala:* *Prakrutha*
4. *Jihwa:* *Alpa lipta*
5. *Shabda:* *Prakrutha*
6. *Sparsha:* *Rooksha*
7. *Druk;* *Prakruta*
8. *Akriti:* *Krishha*

**Examination:**

As shown in the Table no: 1

**General Examination:** Respiratory system: normal  
NVBS, No wheezing on auscultation

CVS: No murmurs on auscultation

Per abdomen: on palpitation nothing specific.

Pulse rate: 70/ min

BP- 130/78 mm/hg

Weight- 66kg

Height: 174cm

**Investigations:**

Pure Tone Audiometry was performed as shown in figure.1.

**Diagnosis:** *Badhirya*, Moderately Severe Sensory Neural Hearing Loss.

**Treatment**

The patient was administered with Ayurvedic treatment for a period of 4 months as shown in table no.2 and was advised to follow *pathya* and avoid *apathya*, and during the period he also followed Yoga practice.

## RESULTS

After first 2 months of Ayurvedic treatment and following strict lifestyle, patient had subjective improvement and tinnitus was reduced to mild. After the completion of treatment for 4 months he was completely relieved from tinnitus. PTA in Right ear has come to 20 dBHL from 53.75 dBHL, and in left ear it has come to 27.25 dbHL from 47.5 dbHL. The changes in hearing levels are shown in the figure 2.

## DISCUSSION

Here we have treated Sensory neural hearing loss by giving the treatments mentioned in the *chikitsa sutra* of *Badhirya*. Which mainly focuses on alleviating the *Vata Kapha doshas* which causes the *Srotho dushti* and leads to ‘*Krichrena sruthi*’<sup>7</sup> or decrease in hearing, Thus to Eliminate the *Srotho dushti* and *Amatva* we have started with *Ama pachana*, followed by *Snehapana* and *Swedana* which leads to *Vilayana* or liquefying the *doshas* in the *Srotas* or channels, which is later on removed from the body through *Virechana*. *Nasya* was administered as it gives strength and stability to *Urdwa jatrugata Indriyas*<sup>8</sup>. Followed by *Karnapurana* which acts by nourishing the ear, as it is a *Sthanika Snehana*, it will lead to increased blood circulation which in turn nourishes the nerve endings. The exposure time of drugs are also more, thus there will be increased bio availability<sup>9</sup>. *Talam* has effects on CNS by cellular absorption through transdermal route and circulation<sup>10</sup>. Orally administered drugs like *sarivadi*

vati is mainly indicated in *Karna roga* and was *Vata kapha hara* in Property.

## CONCLUSION

Implementing Ayurvedic treatment along with making changes in lifestyle, such as following *Pathya* and avoiding *Apathya*, practicing Yoga has brought an improvement in the deceased state of Sensory neural hearing loss. Thus it is feasible and economically viable and in future more studies should be carried out on the present topic.

**Acknowledgements - Nil**

**Conflict of interest - None**

**Source of finance & support - Nil**

## ORCID

Akash Parashar , <https://orcid.org/0000-0003-0557-4612>

## REFERENCES

- 1) Sensorineural Hearing loss. Compilation Prepared by American Speech Language Hearing Association (ASHA).<https://www.asha.org/public/hearing/sensorineural-hearing-loss/>
- 2) Eyvazzadeh A. What is Sensorineural Hearing loss. Healthline.March 2020. <https://www.healthline.com/health/sensorineural-hearing-loss#causes>
- 3) Calson D. Causes of Sensorineural Hearing loss (SNHL). Healthy Hearing.Oct 29 2020.

<https://www.healthyhearing.com/report/50276-Common-causes-of-sensorineural-hearing-loss>

- 4) Deafness and hearing loss. Compilation by World Health Organisation (WHO). <https://www.who.int/news-room/fact-sheets/detail/deafness-and-hearing-loss>
- 5) Murthy K.R Susrutha. Susrutha Samhitha English translation (20/8).Chaukambha Orientalia. Varanasi. Vol-3.First Edition.2002.pp. 98.
- 6) Shastri L, Yogaratnakara. Edited by Brahmasankar Shastri .Chaukambha Prakashan.Varanasi. Reprint 2015:5-15.
- 7) Dutta A, Vagbhata. Ashtanga Hridaya. Uttara tantra. (17/27). Chaukambha Orientalia. Varanasi. Vol-2. Second Edition. 2010. pp:720.
- 8) Dutta A, Vagbhata. Ashtanga Hridaya. Sutra Sthana. (20/37). Chaukambha Orientalia. Varanasi. Vol-2. Second Edition. 2010.pp 293.
- 9) Gupta A.K., Standard operative procedure & probable mode of action of Karnapoorana. World journal of advance Healthcare research. 2020:4(1):280-282.
- 10) Bhatt N. Ayurvedic Intervention in the Management of *Anantavata* W.S.R.to Trigeminal Neuralgia.Journal of Ayurvedic & Natural medicine. Medwin Publishers.2020:4(2):1-3.

**How to cite this article:** Prashar A, Pasha S.M “Ayurvedic Management Of Sensory Neural Hearing Loss- A Case Study”

IRJAY.[online]2022;5(8); 128-132.

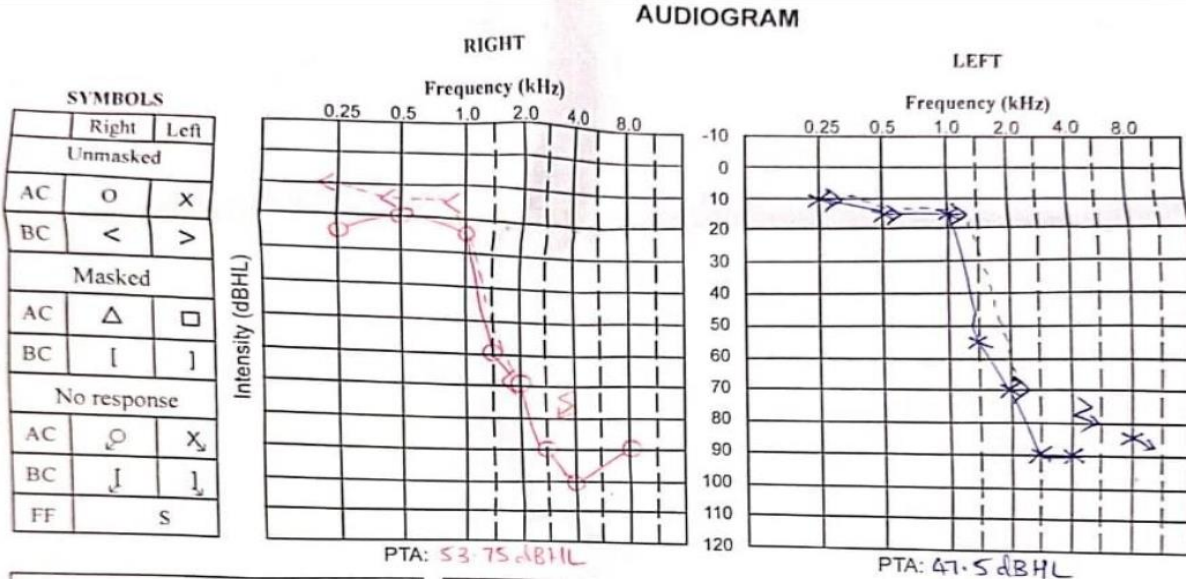
Available from: <https://irjay.com>

DOI link- <https://doi.org/10.47223/IRJAY.2022.5816>

**Table no.1 Examination**

Sl.no:	Examination	Findings
1.	Otосcopy	1)EAC: B/L clear, 2) TM: B/L visible and Intact (rt ear retracted)
2.	Rinne’s test	Positive.AC>BC
3.	Weber’s test	Cant consider
4.	Audiometry	B/L Moderately severe Sensory Neural Hearing Loss PTA:- Right ear:- 53.75 dBHL, Left ear:- 47.5 dBHL
5.	Tinnitus	Subjective

**Fig 1. Pure Tone Audiometry**



**Table 2.Treatment**

Sl.no;	Treatment	Medicine	Mode of administration	Duration
1.	<i>Deepana Pachana</i>	<i>Vaishwanara Churna</i>	5 gm bd before food	3 days
2.	<i>Snehapana</i>	<i>Shatpala Ghritam</i>	➤ 1 <sup>st</sup> day- 20ml before food ➤ 2 <sup>nd</sup> day- 40 ml ➤ 3 <sup>rd</sup> day-60 ml ➤ 4 <sup>th</sup> day-75 ml ➤ 5 <sup>th</sup> day- 90 ml ➤ 6 <sup>th</sup> day- 110 ml ➤ 7 <sup>th</sup> day- 130 ml	7 days
3.	<i>Snehana and Swedana</i>	<i>Narayana taila</i>	Patient underwent <i>Abhyanga</i> and had hot water bath.	1 day
4.	<i>Virechana</i>	<i>Trivrit lehya</i>	35gm before food	1 day
5.	<i>Pratimarsha Nasya</i>	<i>Anutaila</i>	2 drops to each nostrils in early morning	4 months
6.	<i>Karnapoorana</i>	<i>Bilwadi Taila</i>	1 sitting of 8 drops for 7 days once in 4months.	4 months
7.	<i>Talam</i>	<i>Ksheera bala taila (101 avarthi)</i>	7 days.	7 days
8.	Orally	1) <i>Sarivadi vati.</i> 2) <i>Chyavana prasham</i>	2 BD after food 1tbsp at morning with milk, in empty stomach	4months

Fig 2.After Treatment (PTA)

