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MANAGEMENT OF BADHIRYA - SENSORY NEURAL HEARING LOSS WITH AYURVEDA: A CASE REPORT

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ABSTRACT

Sensory neural hearing loss occurs when there is a problem in the sensory apparatus - cochlea (sensory) or in the pathways of conduction of nerve impulses to the brain. SNHL can be Peripheral and Central (auditory pathway or cortex). It can be congenital or acquired. Congenital: present at birth, due to anomalies of inner ear or due to pre or perinatal factors. In present study we have discussed a case of a 12-year-old male child who came to OPD with complains of Sensory neural hearing loss since childhood. Audiometry report showed Right ear - moderate to profound mixed hearing loss Left ear - moderate to severe sensory neural hearing loss. First *Ayurveda* treatment of Sensory neural hearing loss with three sittings of *Marsha Nasya* from *Anu Taila,* 3 sittings of *Karnapurana* from *Bilwadi Taila* And *Sarivadi Vati* with the dose of 250mg thrice a day with luke warm water or milk for 1 month were given in a month and same procedure followed for 6 months. After that his hearing improved showing audiometric findings of Moderate hearing in both ear. After six months repeat Audiometry was done. Patient also felt better hearing in both ears. Decreased hearing due to Sensory neural hearing loss is result of Damage of hair cells, which can be managed with the help of Ayurveda treatment- *Marsha Nasya, Karnapurana* with *Rasayana* treatment. Hearing loss to school going children is a very serious problem affecting their education, skills and social relationship with others. With this study we can cure this type of deafness without any surgical intervention and help them to live their life in a better way.

Key words: *Badhirya*, *Rasayana*, *Nasya, Karnapurana,* Sensory neural hearing loss.

INTRODUCTION

Hearing ability is of utmost importance for the development of speech and language skills in a child. In the earlier times it was very difficult to detect hearing loss in children. However, with advanced medical science and technology hearing loss in children can be detected at an early stage. Hearing loss is a partial or complete inability to receive and interpret sound stimuli in one or both ears. Hearing loss is categorized in to Conductive, Sensorineural and Mixed hearing loss on the basis of pathogenesis. Childhood hearing loss can be a debilitating condition that affects a significant degree of physical, mental and social health. Sensory neural hearing loss is most common hearing loss in children which accounts for 85 to 90% of childhood

hearing loss in India.[1] Increasingly more attention is being focused on mild or slight hearing impairment>20dB HL including unilateral or bilateral loss that may affect 10 to15% of school-aged children with deleterious effects on school performance and social emotional development.[2]

CAUSES:

Congenital hearing loss is a hearing loss that is present at the birth. This loss can be because of genetic or non-genetic reasons. Some of the non-genetic causes can be: Alcohol or smoking in pregnancy, Diabetes in pregnancy, Infection in pregnancy (mumps, syphilis, tuberculosis meningitis, enteric fever, labyrinthitis, Herpes simplex, toxoplasmosis etc.), Brain or nervous disorder in the baby, premature birth, Low birth weight and Birth traumas or injuries. The possibility of non-genetic factors causing hearing loss in babies in only 25 %, however the possibility of babies born with hearing disability at birth due to genetic factors is up to 50 %. Some of the genetic causes can be following: Autosomal recessive hearing loss may occur when the child gets the recessive or abnormal gene from the parents. Autosomal recessive hearing loss constitutes 70 % of all genetic hearing loss cases. Autosomal dominant hearing loss may occur when the defective or abnormal gene from one of the parents with hearing disability may get passed on to the child. This kind of hearing loss occurs in 15 % of the genetic hearing loss cases. Though the above mentioned genetic and non-genetic causes may result in congenital hearing loss but the cause of some of the cases of hearing loss at birth may be difficult to establish.[3]

EXAMINATIONS:[3]

Following are some of the test that may be recommended for the babies and children to diagnose hearing loss:

- Auditory brainstem response
- Central auditory evoked potential
- Otoacoustic emissions
- Middle ear muscle reflex
- Tympanometry
- B.E.R.A
- Audiometry

AYURVEDIC MANAGEMENT

If any symptoms or signs of hearing loss in a child are established, it is suggested to seek immediate medical help to avoid any further complications and get timely medical treatment. If the child is facing deafness or total hearing loss, it will be a good idea to make the child learn sign language[4]. You may enroll the child in special educational institutes or school that specializes in imported education to children with hearing disabilities. Children with Sensorineural hearing loss in both ears need to be identified and fit with hearing aids as soon as possible. It is important that the degree of hearing loss in each ear be diagnosed as accurately as possible.

CASE DESCRIPTION:

Date: 12/10/2018

Age: 12 years

Sex: male

Occupation: Student

Place: Jamnagar

Chief complains

Hearing loss bilateral since childhood.

Can't hear from 1 room to another room.

Speech discrimination poor.

History of Present illness:

A 12 years old male child came in ENT OPD of Shalakya Tantra department in our hospital with the complaints of decrease hearing in both ears from childhood.

History of Past illness:

No any past history found.

Family History:

No any family history found.

Clinical Findings:

Ear Examination:

- Otoscopy

1) EAC: B/L Clear
2) TM: B/L intact retrected

- Rinne's test: Air conduction > Bone conduction Bilateral
- Weber's test: Lateralized to right ear.

- Audiometry: (12/10/2018)

Right ear - moderate to profound mixed hearing loss

Left ear - moderate to severe sensory neural hearing loss

General Examination:

- Weight-42 Kg
- Height-154cm
- Pulse rate-72/min
- BP-110/82 mmHg

Personal History:

- Diet: Vegetarian
- Appetite: Good
- Bowel: Regular
- Micturition: Normal
- Sleep: Normal

Line of Management:

The patient was given Ayurveda treatment with holistic approach i.e. *Shodhana* and *Shamana* treatment with *Pathya Apathya*. Treatment prescribed from was as following:

Table 1:

No.	Treatment	Medicine	Mode of administration	Duration
1	*Nasya*	*Anutaila*	6-6 drops each nostrils for 7 days with 3 days interval	3 months
2	*Karnapurana*	*Bilwadi Taila*	Approx. 24-26 drops (1ml). For 15 days at home with 3 days interval.	6 months
3.	Oral medicine	*Sarivadi Vati*	1 vati of 250mg thrice a day with luke warm water or milk after meal.	6 month continuously.

***Pathya – Apathya*[5]**

Table 2:

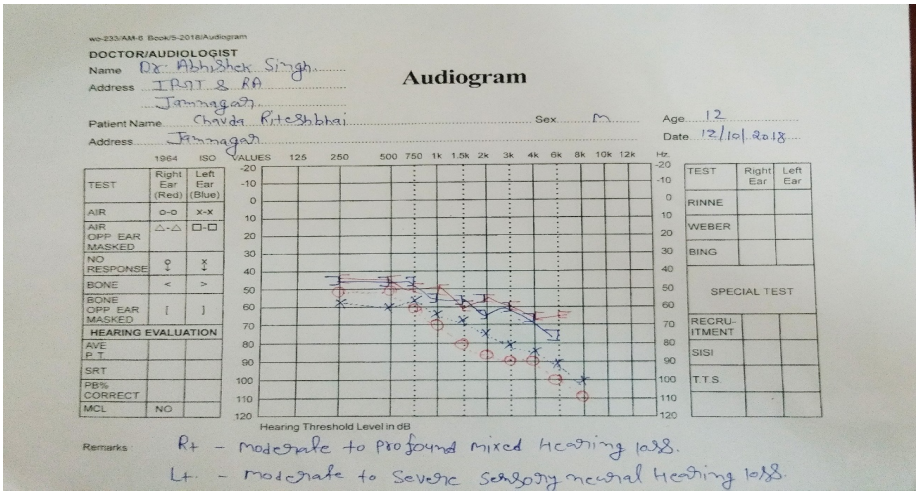
Pathya	***Apathya***
▪ *Avyayama* ▪ *Ashirah Snana* ▪ *Brahmacharya* ▪ *Akatthana* ▪ *Mansarasa* ▪ *Sneha Yukta Ahara Samvahana* ▪ *Garbhagruha* ▪ *Mrudu Shaiya* ▪ *Agni Santapa* ▪ *Dugdha* ▪ *Lavana Yukta Bhojana Sukhoshna Parisheka*	▪ *Danta Kastha* ▪ *Sirahsnaana* ▪ *Vyayama* ▪ *Kanduyana* ▪ *Tushaara* ▪ *Shoka* ▪ *Shrama* ▪ *Ruksha Kashaaya Bhojana*

RESULTS

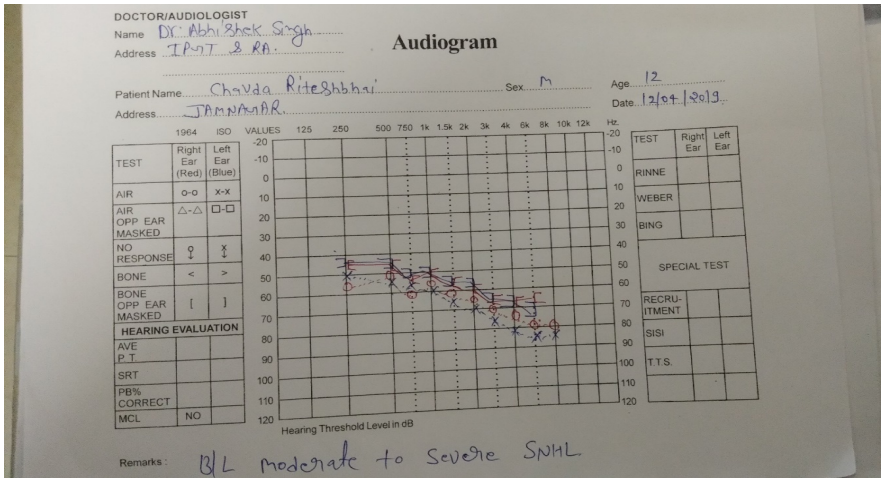
After 06 month of treatment patient got excellent result in subjective criteria like hearing and speech also. Now he was able to hear from one room to another room. He can also able to pronounce words better from previous. Repeat Audiometry was done (12/4/2019), which showed moderate sensory neural hearing loss in both ear.

DATE	12/10/2018	12/04/2019
AUDIOMETRY REPORT	Right ear - moderate to profound mixed hearing loss Left ear - moderate to severe sensory neural hearing loss	B/L Moderate to severe sensory neural hearing loss

AUDIOMETRY (12/10/2018) - Before treatment



AUDIOMETRY (12/04/2019) – After treatment



DISCUSSION

Badhirya (SNHL) is one of the most common ENT disorder and it is one of the challenging problems of all ENT surgeon's, the disease look simples but it doesn't bring satisfactory relief to the patients after repeated visiting the ENT clinic. Thus, the treatment adopted for *Badhirya* in modern system of medicine has not been satisfactory. Surgical intervention (cochlea implant) is rare in these cases and performed only when presented with complications.[6] The "*Vata Vyadhi Chikitsa" Siddhant* can be implemented as a management of *Badhirya*[7]. Besides these, *Ayurveda* also offers different kind of treatment modality in the management of *Badhirya*. E.g. *Ghritapana*, *Rasayanasevana*, *Nasya*, *Snehana*, *Swedana, Snehavirechana, Sirobasti, Karnapurana, Jalaukavacharana* etc.[8] but, *Karnapurana* and *Nasya* is most prescribed procedure in the management of *Badhirya.*

As mentioned earlier that the signs and symptoms of Hearing loss can be correlated with *Badhirya* in *Ayurveda*. *Badhirya* is due to vitiation of *Vata* and *Kapha Dosha*[9]. *Anu Taila Nasya*[10] scratches out the *Kapha Dosha* from *Shira* and improves the function of *indriyas* (*Karnaindriya*) thereby clearing the *Srotorodha*. *Anu Taila* was planned which pacifies the aggravated *Vata Dosha* in head and helps to normalize the function of central nervous system by nourishing the nervous system And balancing the circulation of blood in the sense organs including ear also.

As *Shringataka marma* in *Shira* is the junction of all sense organs like eye, ear, nose and any medicine applied over this area targets the vitiated *doshas* related to all sense organs and helps in nourishment of nerves connecting to these areas. *Karnpurana*[11] is one of the basic treatments mentioned in Ayurvedic literature for all *Karnarogas*. *Karnpurana* with *Bilwadi Taila* has the *Vatashamaka* property. *Sarivadi Vati*[12] removes *Srotorodha* and does *Vatanulomana*. It is the best *Rasayana Dravya* for *Shravnendriya Vikara*. During six months of treatment period and follow up we have not encountered any ADR related to oral treatment *Nasya*, and *Karnapurana* in the patient. Patient and his family were very happy that his hearing was improved and they were suggested for surgery from allopathic medicine before 3 years. Patient was prescribed routine and classical Ayurveda medicine and was not treated with any intentions of future publication we have not taken any accent of patient or prior informed consent from patient.

CONCLUSION

Congenital hearing loss is a hearing loss that is present at the birth. Childhood hearing loss can be a debilitating condition that affects a significant degree of physical, mental and social health. *Anu Taila Nasya, Bilwadi Taila Karnapurana* and *Sarivadi Vati* orally gives excellent result in congenital sensory neural hearing loss thus Ayurveda has a variety of medicines and procedures to treat *Badhirya* (sensory neural hearing loss). This case study indicates effectiveness of *Ayurveda* in management of *Badhirya*.

REFERENCES

1. aulast=Varshney http://www.indianjotol.org/article.asp?issn=0971-7749;year=2016;volime=22;issue=2;space=73;epage=76
2. Deboshree Bhattacharjee https://parenting.firstcry.com/articles/hearing-loss-in-children
3. Deboshree Bhattacharjeehttps://parenting.firstcry.com/articles/hearing-loss-in-children
4. Deboshree Bhattacharjeehttps://parenting.firstcry.com/articles/hearing-loss-in-children
5. YT Karnaroga *rogadhikara Uttar tantra* 1-4
6. Deboshree Bhattacharjeehttps://parenting.firstcry.com/articles/hearing-loss-in-children
7. Kaviraja Ambikadatta Shastri Editor of Acharya Sushruta, "Sushruta Samhita" with hindi commentary "Ayurveda tattva sandipika" edited by, Chaukhambha Sanskrit Sansthan, Varanasi,2011, uttaratamtra, 21/38, page no.130
8. kaviraj atridev gupta, with Chaukhambha krishnadas academy,Vagbhatta, " Aśtang Samgraha", with hindi commentary, Varanasi, reprint 2005, uttaratamtra,
9. Kaviraj Ambikadutta Shastri Editor of Ayurveda Tattva Sandipika, Hindi commentary on Shushrut samhita, Chaukhamba Sanskrit Prakashana, Varanasi, reprint 2014, Uttartantra 20/08.
10. Acharya Trivikrama Yadav and Narayanrao Acharya editer of Charak samhita, Chokhamba Surbharati prakashan Varanasi 2000, Sutrasthana 5/63-65 Page no.41)
11. Kaviraja Ambikadatta Shastri Editor of Acharya Sushruta, "Sushruta Samhita" with hindi commentary "Ayurveda tattva sandipika" Chaukhambha Sanskrit Sansthan, Varanasi,2011, uttaratamtra, 21/35, page no.130
12. Pro. Krushna Chandra Chunekar.Editor of .Bhavmishra, "Bhavprakash Nighantu", Hindi Vyakyotpat, Punah mudrit – 2013. Chaukhambha Vidyabharti academy, guduchyadi varga, 2/49

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