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Research Article

SINGLE ARM CLINICAL STUDY TO EVALUATE THE EFFECT OF *NASYA* IN MENIERE'S DISEASE FOLLOWED BY CONCOMITANT TREATMENTS

Biserotti Anuradha[1]*, A S Prashanth[2]

*[1]PG Scholar, [2]Professor & HOD, Department of Kayachikitsa, Ayurveda Mahavidyalaya, Hubli, Karnataka, India.

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ABSTRACT

Meniere's Disease is an ear disease specifically of inner ear. The clinical presentation includes vertigo which is episodic, sensorineural hearing loss which fluctuates, tinnitus and sensation of fullness of ear (aural fullness). Associated complaints includes headache, nausea, drop attacks (otolith crisis of Tumarkin). Meniere's disease is relapsing in nature which greatly affects patient's daily activities. The highest prevalent age group is 30-60 years of age. The main pathology occurs as the result of endolymphatic sac distension caused by excessive production or faulty absorption of endolymph or both. The cause is not known clearly. But few factors may contribute in the pathophysiology of Meniere's disease like excessive retention of water and sodium, allergic reactions, vasomotor disorders, auto immune disorders like rheumatoid fever, middle ear infections etc. *Acharya Sushruta* has explained *Karnarogas* like *Karnanaada, Karnakshweda, Badhirya* which are nearer to Meniere's disease when studied along with *Bhrama*. 22 subjects diagnosed with Meniere's Disease fulfilling the inclusion criteria were selected for the study. *Amapachana* was done with *Shunthi churna*. *Nasya* with *Bhringaraja taila* followed by *Karnapoorana* with *Bilva Taila* and *Sarivadi vati* along with *Dhanwayasa Kashaya* and *Satwavajaya chikitsa* was given. Patient showed significant results in subjective and objective parameters.

INTRODUCTION

Meniere's disease is a disorder of the Endolymphatic sac which is situated in inner ear. The main presentation of Meniere's disease is includes fluctuating hearing loss, occasional vertigo which is episodic, tinnitus and aural fullness. It was first identified in the early 1800s by Prosper Meniere.[1] It affects between 0.3 and 1.9 per 1000 people that is 2 persons per 1000 people approximately. It can be seen in almost all ages; peak incidence in 40-60 years old.[2]

The causes of Meniere's disease is not known exactly but we can consider both genetic and environmental factors and various etiologies like; allergy, metabolic disorder, syphilis, myxoedema, hypertension, hypothyroidism, middle ear infection, stenosis of the internal auditory canal, trauma, arteriosclerosis and psychological disorders. Symptoms are believed to occur as the result of increased accumulation of fluid in the endolymphatic system causing engorgement and due to excessive production of endolymph in the Stria vascularis and may be due to decreased absorption of endolymph in the endolymphatic sac. [3,4]

Even though the incidence of Meniere's disease is less, recently there is increase in cases in developing countries like India due to many reasons. So this disease needs better attention.

According to Ayurveda, *Shravanendriya* is an important sense organ; one among the *Panchendriya* and is a *Gyanendriya*; which is situated in *Urdhwa jatru*, and is predominant of *Akasha* and *Vayu mahabhuta*. It is *Sukshma*, *Vivara yukta* and *Avakasha yukta Indriya.*

Shravanendriya is the *Adhisthana* of *Vaata* mainly *Praana*, *Udaana*, and *Vyana vaata*; and *kapha* that is *Tarpaka kapha. Tarpaka kapha* nourishes the *Shravanendriya*.

The clinical features of Meniere's disease are because of the vitiation and *Prakopa* of *Vaata* in *Urdhwa Gami Siras* of *Shravanendriya* which will

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disrupt the normal *Karma* of *Shravanendriya*. *Doshas* gets vitiated due to *Nidanas* like *Sheetajala sevana, Sheeta Vayu Sevana, Plavana, Ativyayama, Shirasnana, Heena, Ati* and *Mithya yoga* of *Karnendriya.* Due to vitiation *Doshas* the symptoms like *Karnanaada*, *Karnakshweda*, *Badhirya* and *Bhrama* are manifested. Here an attempt is made to understand the Meniere's disease by the fundamental principles of Ayurveda; and to manage the condition in a better way.

Tinnitus is understood as *Karnanaada* and *Karnakshweda*. In *Karnanaada* mainly vitiation of *Vata dosha* is found. Person hears different sounds resembling *Mridangavat*, *Bherivat*, hissing, ringing, roaring etc[5] and *Venughoshvat* sounds are heard in *Karnakshweda*.[6] According to *Acharya Vagbhata* that if *Karnanaada* is not treated as early as possible it may cause *Badhirya*.

Badhirya manifests due to involvement of *Vata* and *Kapha dosha* or only *Vata dosha*.[7]

Acharya Madhavakara explains *Bhrama* as '*Chakravat patati*' i.e., person feels as if he is sitting on a moving wheel and he keeps falling on the ground. *Bhrama* can manifest due to the vitiation of *Vata*, *Pitta* and *Rajo dosha*.[8]

When we look into the *Samprapti* of each above mentioned diseases we get to know that all are *Vata dosha pradhana vyadhis*. Hence by considering the involvement of *Doshas* we can treat the Meniere's disease.

We will understand the Meniere's disease into our *Tridosha* concept theory; hence by studying the pathophysiology of the Meniere's disease, can be concluded that it is a *Vata pradhana tridoshaja Vyadhi* in *Kaphasthana*. *Sroto margavarodha* in *Urdhavagami siras* of *Shravanendriya* due to the vitiation of *Tarpaka kapha* in the beginning and that leads to aggravation *Vata dosha*.

We can consider the increased endolymph as *Dusta kapha*. The *Dusta kapha dosha* obstructs the conduction of sensory and mechanical signals through the vestibulocochlear nerve to the Auditory Center and Organ of Corti. The vitiated *Kapha dosha* causes dilatation in endolymphatic sac which mechanically and chemically interfere with the sensory cells for balance and hearing, which can lead to temporary dysfunction and in later stages due the *Vata dosha* influence even death of the sensory cells occur, which in turn causes the typical symptoms of Meniere's Disease: vertigo, hearing loss and tinnitus.

Laghu guna which is common in both *Vata* and *Pitta dosha* which makes the person feels *Laghavata* (vertigo) in *Sharira*. Due to *Kapha avarana* in *Shabdavaha srotas Karnanaada* occurs it can be *Shankha, Mridanga, Bherivat Shabda*. In *Karnakshweda Venughoshavat* sounds are heard. Due to the *Avarana* in *Shabdavahasrotas Badhirya* occurs.

Prana vata, Udana vata, Sadhaka pitta and Tarpaka kapha are the *Doshas* responsible for the function of *Indriyas*. Hence any *Dosha* vitiation of these leads to *Indriya karmahani.*

Tarpaka kapha nourishes the brain, *Panchendriya* (but except *Twak)* and *Indriyakarma* hence helps in *Indriyartha sannikarsha*.

Prana vata and *Udana vata; Prana vata* does the *Dharana* of the *Buddhi*, *Indriya* and *Mana.*[9] Meniere's disease occurs due to the imbalance in *Prana*, *Udana*, *Vyana vata* and *Tarpaka kapha*.

OBJECTIVES OF STUDY

- To evaluate the combined effect of *Nasya karma* followed by *Karna poorana, Satwavajaya* and *Shamanoushdhis*.
- To study the clinical conditions explained in Ayurveda having similar presentations with that of Meniere's disease.

MATERIALS AND METHODS

Study Design: Open Labeled Single Arm Clinical Study

Study Duration: The total duration of study was 60 days.

Study Population: Minimum of 26 subjects fulfilling the inclusion and exclusion criteria were incidentally selected. There were 4 dropouts due to lack of understanding and engagement in the trial.

Plan of Work

The entire study was designed to be conducted in three phases.

Phase 1

Detailed literature review, done extensively using primary, secondary and tertiary resources.

Documentation: Designing of data entry form, Informed consent, patient information sheet.

Ethical Committee approval: Ethical clearance was obtained from the Institutional Ethical Committee of Ayurveda Mahavidyalaya. Hubli.

Phase 2

Data was collected using data entry form after explaining patient information sheet and signing informed consent document.

The sample size was collected which comes under the inclusion and exclusion criteria at the time of enrolment.

Phase 3

Reports were analysed using various statistical tools.

Reporting of results and presentation.

Criteria for Diagnosis

For diagnosis, detailed medical history was taken and physical examination was done according to both Ayurvedic and modern clinical methods.

Diagnostic criteria as of 2015 by International Classification of Vestibular Disorders was included.

Definite Meniere's disease

i. Two or more episodes of vertigo each lasting 20 minutes to 12 hours.
ii. Audiometrically documented low to medium frequency sensorineural hearing loss in the affected ear on at least 1 occasion before, during or after one of the episodes of vertigo.
iii. Fluctuating aural symptoms in the affected ear.
iv. Not better accounted for by another vestibular diagnosis

Probable Meniere's disease

a) Two or more episodes of vertigo or dizziness each lasting 20 minutes to 24 hours.
b) Fluctuating aural symptoms in the reported ear.
c) Not better accounted for by another vestibular diagnosis.

To confirm or to exclude other medical disorders; opinion of ENT surgeon and of neurophysician was taken and tuning fork test, audiometry, and necessary investigations were carried out.

Inclusion Criteria

- Diagnosed case of Meniere's disease
- Age group of 20 to 60 years of both genders.
- Subjects who are fit for *Nasya karma* and *Karna poorana*.

Exclusion Criteria

- Vestibular migraine, otosclerosis, perforated tympanic membrane.
- Uncontrolled diabetes mellitus
- Pregnant, purpureal and lactating women
- Cerebellar ataxia, epilepsy
- Benign paroxysmal positional vertigo
- Acoustic neuroma
- Vertibro bacillary insufficiency
- Syphilis and Cogan's Syndrome
- Vestibular neuritis
- Severe psychiatric illness; diagnosis was made on subjective and objective findings of Meniere's disease.

Source of Data

Clinical Source

- A clinical survey of subjects attending O.P.D & I.P.D, of Post Graduate Department of Kayachikitsa, Ayurveda Mahavidyalaya and Hospital, Hubbali was made and subjects fulfilling the criteria of diagnosis and inclusion criteria of Meniere's Disease, as per proforma was selected for the study.
- Patients were registered and recorded as per the specially designed clinical proforma.
- The parameters of signs and symptoms were scored as per the proforma, and applied suitable statistical methods.

Literary Source

Review of literature was done from textbooks available in Post Graduate Library, Department of Kayachikitsa, Ayurveda Mahavidyalaya Hubballi, from Authentic Research Journals, Websites and Digital Publications etc.

Assessment Criteria

Assessment of subjective and objective parameters were done before treatment and after the treatment.

A	Subjective Parameters
1	Vertigo
2	Headache
3	Tinnitus
4	Aural fullness
5	Nausea

B	Objective Parameter
1	Hearing Loss

Table 1: Showing Assessment of Vertigo

For assessment of Vertigo, Vertigo symptom scale short form (VSS-SF) was included.

Parameters VSS Total Score 0–60	Grades
VSS Score 0	Grade 0
VSS Score 1 – 15	Grade 1
VSS Score 16 – 30	Grade 2
VSS Score 31- 45	Grade 3
VSS Score 46 – 60	Grade 4

Table 2: Showing Assesment of Headache

Parameters	Grades
No Headache	Grade 0
Mild headache aware only if pay attention to it/ once a week / 1–3 hrs per day	Grade 1
Moderate headache able to tolerate/twice a week / 3-6 hrs per day	Grade 2
Severe headache disturbs the daily routine and/ thrice a week/may be medications are required	Grade 3
Very severe headache inhibits daily activities/ almost every day	Grade 4

Table 3: Showing Assessment of Tinnitus

For assessment of Tinnitus, Tinnitus Handicap Inventory (THI) questionnaire was included. Total score ranges from 0 to 100.

Parameters THI Score 0–100	Grades
THI Score 0	Grade 0
THI Score 1- 16	Grade 1
THI Score 18- 36	Grade 2
THI Score 38- 56	Grade 3
THI Score 58- 76	Grade 4
THIScore78- 100	Grade 5

Table 4: Showing Assessment of Aural Fullness

Parameters	Grades
No Aural fullness	Grade 0
Mild fullness in the ear, aware only if pay attention to it /once a week / 1–3 hrs per day	Grade 1
Moderate fullness in unilateral or bilateral ear able to tolerate/ twice a week/ 3-6 hrs per day	Grade 2
Severe fullness in the ear unilateral or bilateral disturbs the daily routine and / thrice a week/may be medications are required	Grade 3
Very severe fullness or pressure in both ears inhibits daily activities and person has to rest/ almost every day	Grade 4

Table 5: Showing Assessment of Nausea

Parameters	Grades
No Nausea **(None)**	Grade 0
Nausea is anticipated and prophylaxis medications may be given. **(Anticipated)**	Grade 1
Nausea reported. Able to tolerate food or Medications by mouth. **(Mild)**	Grade 2
Nausea persisting lacks appetite. Able to eat small meals occasionally. **(Moderate)**	Grade 3
Nausea ongoing, no appetite. Unable to tolerate food/medications by mouth. **(Severe)**	Grade 4

Table 6: Showing Assessment of Hearing Loss

Pure Tone Audiometry

Parameters Sensorineural HL dB	Grades
0 – 20dB	Grade 0
20 – 40 dB	Grade 1
40 – 60 dB	Grade 2
60 – 80 dB	Grade 3
More than 80 dB	Grade 4

Intervention

Amapachana	*Shunthi Churna* 5 grams twice daily before food with *Ushnodaka* for 3 days.
Nasya Karma	*Poorva Karma: Mukha abhyanga* with *Bala Taila* *Bashpa Swedana* *Pradhana Karma: Nasya* with *Bhringaraja Taila*
Karnapoorana	*Poorva Karma: Mukha abhyanga* with *Bala Taila* *Bashpa Swedana*

	Pradhana Karma: Karnapoorana with *Bilva Taila*
Shamanoushadhi	*Sarivadi Vati* 2 tablets BD *Dhanwayasa Kashaya* 25m*l I*
Satwavajaya chikitsa	*Shavasana* along with relaxation Technique
Treatment duration	60 days
Follow Up	Every 15th day

OBSERVATION AND RESULTS

26 subjects fulfilling the diagnostic criteria were selected in which 4 subjects were dropped out at various stages of study (2 subjects dropped out due to inconvenience in travelling, 1 subject could not come for follow up and 1 subject skipped the scheduled procedure). Other 22 subjects completed the treatment.

Table 7: Showing Sex wise distribution

Sex	No of subjects	%
Male	17	77.27%
Female	05	22.72%

Maximum number of subjects i.e., 17 (77.27%) were male and 05 (22.72%) were female

Table 8: Showing Age wise distribution

Age in years	No of subjects	%
20 – 30	04	18.18%
31 – 40	03	13.63%
41 – 50	08	36.36%
51 - 60	07	31.81%

Among 22 subjects maximum number of subjects i.e., 08 (36.36%) were from age group 41–50 years, 07 (31.81%) were from 51–60 age group, 04 (18.18%) from 20–30 age group, and remaining i.e. 03 (13.63%) were from 31–40.

Table 9: Showing distribution of *Nidana*

Nidana	No of Subjects	%
Chronic Otitis Media	04	18.18%
Chronic Sinusitis	03	13.63%
Chronic Rhinitis	02	9.09%
Allergy	06	27.27%
Unknown	07	31.81%

In maximum number of subjects i.e., 07 (31.81%) the *Nidana* was unknown, 6 (27.27%) the *Nidana* was allergy, 04 (18.18%) the *Nidana* was Chronic Otitis media, 03 (13.63%) the *Nidana* was Chronic Sinusitis and 02 (9.09%) the *Nidana* was Chronic Rhnitis.

Table 10: Showing Chronicity Wise Distribution

Duration	No of Subjects	%
5 – 8 months	01	4.54%
1 – 2 years	06	27.27%
2 – 3 years	05	22.72%
3 – 4years	07	31.81%
4 – 5 years	03	13.63%

Maximum of subjects i.e., 07 (31.81%) were having chronicity since 3–4 years, 06 (27.27%) were having chronicity since 1–2 years, 05 (22.72%) were having chronicity since 2–3years, 03 (13.63%) were having chronicity since 4–5years, 01 (4.54%) were having chronicity since 5–8 months.

RESULTS

Subjective parameters like vertigo, tinnitus, aural fullness, headache, nausea were recorded before treatment and after treatment by using appropriate questionnaire. Objective parameter like hearing loss was recorded before and after treatment and subjected to statistical analysis within the group by applying Wilcoxon signed rank test using Graph Pad Prism statistical software.

Table 11: Showing effect of Therapy on Subjective Parameter Vertigo

Parameter	BT	AT	Relief %	Sum of Ranks	Mean of ranks	Mean difference	SD	z-value	p– value	Remarks
Vertigo	56	08	85.71%	253	126.5	2.55	30.8	4.10	<0.00001	H.S

Before treatment the parameter score was 56 and after treatment was 08 with 85.71% improvement. And there was statistically highly significant (p<0.0001) result with "z" value 4.10.

Table 12: Showing effect of Therapy on Subjective Parameter Headache

Parameter	BT	AT	Relief %	Sum of Ranks	Mean of ranks	Mean difference	SD	z-value	p– value	Remarks
Headache	38	09	76.31%	190	95	2	24.85	3.82	0.00014	S

Before treatment the parameter score was 38 and after treatment was 09 with 76.31% improvement. And there was statistically significant (p<0.00014) result with "z" value 3.82.

Table 13: Showing effect of Therapy on Subjective Parameter on Tinnitus

Parameter	BT	AT	Relief %	Sum of Ranks	Mean of ranks	Mean difference	SD	z -value	p – value	Remarks
Tinnitus	48	23	52.08%	120	60	3.2	17.61	3.40	0.00064	S

Before treatment the parameter score was 48 and after treatment was 23 with 52.08% improvement. And there was statistically significant (p<0.00064) result with "z" value 3.40.

Table 14: Showing effect of therapy on subjective parameter on Aural fullness

Parameter	BT	AT	Relief %	Sum of Ranks	Mean of ranks	Mean difference	SD	z -value	p – value	Remarks
Aural fullness	48	15	68.75%	190	95	0.21	24.85	3.82	0.00014	S

Before treatment the parameter score was 48 and after treatment was 15 with 68.75% improvement. And there was statistically significant (p<0.00014) result with "z" value 3.82.

Table 15: Showing effect of Therapy on Subjective Parameter Nausea

Parameter	BT	AT	Relief %	Sum of Ranks	Mean of ranks	Mean difference	SD	z -value	p – value	Remarks
Nausea	17	07	58.82%	55	27.5	1.7	9.81	2.80	0.005	S

Before treatment the parameter score was 17 and after treatment was 07 with 58.82% improvement. And there was statistically significant (p<0.005) result with "z" value 2.80.

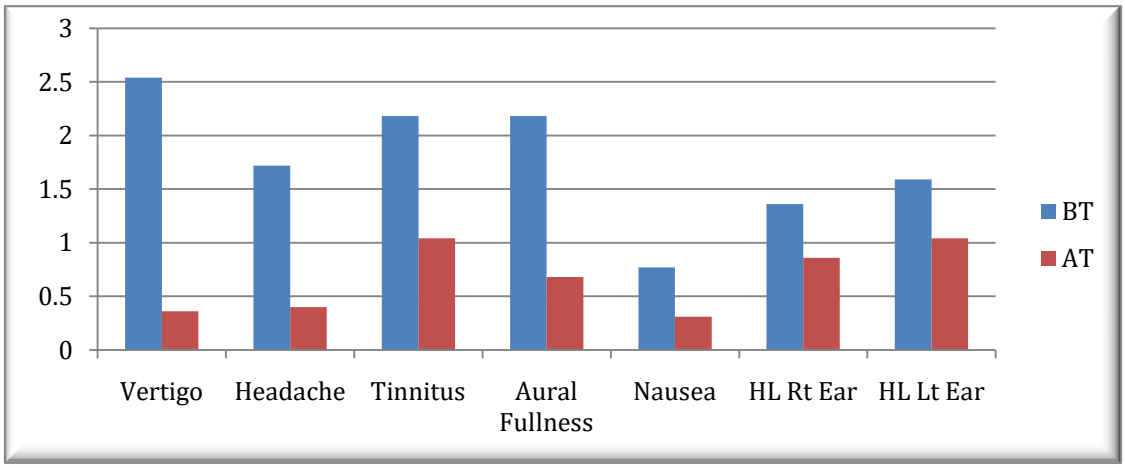
Table 16: Showing effect of Therapy on Objective Parameter Hearing Loss

Parameter	BT	AT	Relief %	Sum of Ranks	Mean of ranks	Mean difference	SD	z -value	p – value	Remarks
Right ear	30	19	36.66%	78	39	-3	12.75	3.05	0.0022	S
Left ear	35	23	34.28%	91	45.5	1	14.31	3.17	0.00148	S

Before treatment the parameter Right ear hearing loss score was 30 and after treatment was 19 with 36.66% improvement. And there was statistically significant (p<0.0022) result with "z" value 3.05.

Before treatment the parameter left ear hearing loss score was 35 and after treatment was 23 with 34.28% improvement. And there was statistically significant (p<0.00148) result with "z" value 3.17.

Graph no 1. Showing the Distribution According to overall Assessment of Therapy on all Parameters



Relief	No of Subjects	Percentage	Remarks
Above 75%	05	22.72%	Marked Relief
51% to 75%	14	63.63%	Moderate Relief
26% to 50%	03	13.63%	Mild Relief
Less than 25%	00	00	No Relief

DISCUSSION

The clinical presentation of tinnitus is considered among *Karnanaada* and *Karnakshweda*. While *Karnanaada* is due to *Vata* only, *Prakupita vata* in the *Karna* produces symptoms like subjective sensation of hearing different kinds of sounds like *Bheri*, *Mrudanga*, *Shanka*, hissing, and sounds of various birds.

Vata along with *Pitta* causes *Karnakshweda*, due to *Nidana sevana* like *Shrama, Dhatu kshaya, Atisevana* of *Kashaya rasa, Ruksha ahara sevana* and *Sheetapadartha sevana* after *Shirovirechana*, produces symptoms like sounds that resemble the blowing of wind through bamboo.

Due to *Kevala Vata* or *Vata* along with *Kapha* produces *Badhirya*. *Badhirya* can also result from *Dhatukshaya janya vata prakopa* or *Kapha avaranajanya vata prakopa* and also due to *Vayosahaja vata prakopa* which leads to *Indriya karmahani*.

Samprapti of Meniere's disease can be understood in two ways as *Margavaranajanya* and *Dhatukshayajanya*. Due to the improper circulation of endolymph the hydrops will develop.

We can understand it as *Margavarana* may be caused by *Aama* or I which hampers the normal flow which leads to defective absorption and causes distension in membranous labyrinth and cochlear membranes too.

Chronic *Margavarana* leads to *Dhatukshaya* i.e., due to obstruction the nourishment to the organs will be hampered, or some other factors responsible for *Dhatukshaya* which leads to degenerative changes in the vestibulo– cochlear nerve thus leading to improper conduction of sound waves and the pressure changes which leads to the manifestation of symptomatology of Meniere's Disease. The prognosis of the Meniere's disease is better in *Margavaranajanya* than *Dhatukshayajanya*.

Meniere's disease is the resultant of dilatation of endolymphatic sac i.e., endolymphatic hydrops which may be caused by excessive production of endolymph or the decreased absorption of endolymph.

Nasya being the gold standard treatment in the management of *Urdhvajatrugata vikaras* holds good even in the management of Meniere's disease. In the initial phase *Teekshna*, *Shodhana nasya* is preferred to relieve *Margavarana* by expelling the morbid *Doshas*.

Bhrinagaraja taila was selected for the *Nasya karma* in the present study. Method of preparation of *Bhringaraja taila* was obtained from *Bhaishajya Ratnavali Kshudra roga adhikara. Bhringaraja* is indicated for *Nasya* and *Abhyanga* in diseases of *Shira, karna akshi*, which acts as *Tridoshahara* and *Rasayana*. Due to these properties it helps to clear the *Srotas* and removes excess endolymph by the diffusion and also aids in the better absorption of endolymph by endolymphatic sac.

In this study, *Karnapoorana* was done with *Bilva taila*. *Bilva taila* contains *Aja ksheera, Gomutra* and *Bilva phala majja* which does *Vatashamana*. It helps in the nourishment of *Indriya* and prevents degenerative changes of *Karnendriya*.

Hence helps to reduce the symptoms of Meniere's disease like vertigo, tinnitus, Hearing loss. *Bilva taila* is anti ototoxic property in nature. It is helpful in repositioning of free floating particles of otoliths within a part of the inner ear which are responsible for maintaining equilibrium. And also promotes regeneration of the inner ear hair cells, which is a boone for the subjects with Meniere's disease.

Sarivadi vati was used as *Shamanoushadhi* in the present study. Method of preparation of *Sarivadi vati* was obtained from *Bhaishajya ratnavali karnaroga adhikara.* It is the best drug mentioned by most of the *Acharyas* in the management of *Karna rogas*. *Sarivadi vati* contains drugs like *Sariva, Madhuka, Nilotpala, Guduchi, Devapushpa, Triphala, Abhraka bhasma, Loha bhasma, Kesharaja, Yava, Kakamachi, Gunjamoola.*

Once *Srotorodha* is removed proper nutrition will reach the all cells which enhance the overall functioning of *Indriya* by its *Vatahara* and *Rasayana* property.

It possesses anti inflammatory and antioxidant property. Hence it helps in pacifying symptoms like *Karnanaada*, *Karnakshveda* by *Samprapti vighatana*. It is the best *Rasayana dravya* for *Shravanendriya vikara*.

Dhanwayasa churna was selected for the present study. Reference obtained from *Chakradatta Murcha chikitsa*. It is mentioned that *Dhanwayasa kashaya* along with ghee relieves vertigo. *Dhanwayasa* acts as *Tridoshahara* and combats the aggravated *Laghuta* and *Chala guna* vitiation of *Vatadosha* hence pacifies *Bhrama*.

Satwavajaya chikitsa reduces the vulnerability of the subjects with Meniere's disease in developing anxiety and stress which further aggravates the

somatic symptoms of vertigo and allows the subject to lead more productive life. In the present study subjects were given *Shavasana* along with relaxation technique weekly which helped greatly along other interventions.

CONCLUSION

- Meniere's disease is a rare yet the incidence of Meniere's is increasing mainly because of erratic lifestyle. It is not fatal but frightening episodes of vertigo may lead to fatal condition.
- Most affected age group is 30 to 60 years. Frequent screening is necessary to early identification of the subjects.
- Even though we cannot directly correlate Ayurvedic conditions like *Karnanaada, Karnakshweda, Badhirya* and *Bhrama* but the *Doshic* involvement can be analysed by knowing these conditions. and the principles of the *Chikitsa* mentioned for *Karnanaada, Karnakshweda, Badhirya* and *Bhrama* holds good for the management of the Meniere's disease also.
- Majority of the subjects were having mental stress as a triggering factor.
- There was no significant relief by interventions of other systems of medicine.
- Both the procedures were very simple, safe, economical, effective and done on the OPD basis. Symptomatic relief is found in majority of the subjects.
- All subjects showed statistically significant result in subjective and objective parameters when compared before and after treatment.
- No complications were seen during the study.

REFERENCES

1. B.S. Tuli; Text book of Ear Nose and Throat, Jaypee publication second edition Chapter no. 13- Vertigo and Meniere's Disease. Page no- 114 to 117.
2. Baye lisa Introduction to the Mystery of Meniere's Disease 1981 Graduate student Theses Dissertations & Professional papers 2738 University of Montana Page no.4
3. P.Hazarika D.R. Nayak R. Balakrishnan; Ear Nose Throat And Head & Neck Surgery Clinical & Practical;. CBS Publication 3rd Edition; Chapter no.19, Diseases of the Inner Ear. Page no. 192,193.
4. Baye lisa Introduction to the Mystery of Meniere's Disease 1981 Graduate student Theses Dissertations & Professional papers 2738 University of Montana Page no.4
5. Edited by Vd. Trikamji Acharya Sushruta samhita Shree Dalhanacharya virachitaya Nibandha sangraha. Chaukamba Sanskrit Sansthana Varanasi 2019, Uttaratantra Chapter no. 20 Karnagata roga vigynaniyam shloka no.7. Page no-643.
6. Edited by Vd. Trikamji Acharya Sushruta samhita Shree Dalhanacharya virachitaya Nibandha sangraha. Chaukamba Sanskrit Sansthana Varanasi 2019, Uttaratantra Chapter no. 20 Karnagata roga vigynaniyam shloka no.7.Page no-643.
7. Edited by Vd. Trikamji Acharya Sushruta samhita Shree Dalhanacharya virachitaya Nibandha sangraha. Chaukamba Sanskrit Sansthana Varanasi 2019, Uttaratantra Chapter no. 20 Karnagata roga vigynaniyam, shloka no-8, page no-643.
8. Prof. Yadunandan Upadhyaya Madhava Nidana of Sri Madhavakara, Edited, Hindi Commentary, Reprint Edition Vol 1. Chaukamba Prakashana Varanasi 2012, Chapter no 17 Murcha Bhrama Nidra Tandra Sanyasa Nidanam.
9. Revised by Charaka and Dridhabala with the Ayurveda Dipika Commentary of Chakrapanidatta, sutrasthana 20th chapter, Published by Chaukamba Publications New Delhi, Reprint Edition 2020.

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***Address for correspondence**
Dr. Biserotti Anuradha
PG Scholar
Kayachikitsa Department
Ayurveda Mahavidyalaya
Hubli, Karnataka, India.
Email: anubiserotti@gmail.com
Ph: 9588690655

Images


SHUNTHI CHURNA
BILVA TAILA
BHRINGARAJA TAILA
SARIVADI VATI
DHANWAYASA CHURNA