AYURVEDIC APPROACH TO MENIERE’S DISEASE – A REVIEW

Sandhya Rani. D1, Madhusudan B. G2

1Reader, Dept. of Shalakya Tantra; 2Assistant Professor; Dept. of Roganidana, JSS Ayurveda Medical College, Mysuru - 570028, Karnataka, India

Email: sandhyaranid30@yahoo.in

ABSTRACT

Shalakya tantra is a branch of Ayurveda which deals with disorders of head and neck and all its different organ complexes along with special types of therapies which are concentrated on these parts. Meniere's disease also called as Endolymphatic hydrops is a disorder of the inner ear, characterized by triad of episodes of vertigo, tinnitus and hearing loss. The main pathology in Meniere’s disease is the distention of endolymphatic system due to increased volume of endolymph. The symptoms of Meniere’s disease can be correlated to Vataja Karna Roga along with Bhrama. When these symptoms are analysed, there is vitiation of Vata and Pitta dosha in Kapha sthana. Hence an attempt has been herewith made to understand the disease and its management through in Ayurveda.

Keywords: Meniere’s disease, Vertigo, Tinnitus, Hearing loss, Shalakya tantra, Vataja Karna Roga, Bhrama.

INTRODUCTION

Meniere's disease also called as Endolymphatic hydrops is a disorder of the inner ear, characterized by triad of episodes of vertigo, tinnitus and hearing loss. The main pathology in Meniere’s disease is the distention of endolymphatic system due to increased volume of endolymph(1).

Meniere’s disease was first identified in the early 1800s by Prosper Meniere. It affects between 0.3 and 1.9 per 1,000 people that is 2 persons per 1,000 people approximately. It most often starts in the 40s to 60s. Females are more commonly affected than males(2).

OBJECTIVES:

1. An overview of Meniere’s disease and its understanding through Ayurveda.

Human Ear consists of 3 parts:

1. External ear
2. Middle ear
3. Inner ear

The inner ear or the Labyrinth is an important organ of hearing and balance. It consists of a bony and a membranous labyrinth.

Bony labyrinth consists of

1. Vestibule,
2. Semicircular canals
3. Cochlea

The membranous labyrinth consists of

1. Cochlear duct
2. Utricle
3. Saccule
4. Three semicircular ducts
5. Endolymphatic duct and sac(3)

The sensory epithelium of Utricle and Saccule is called Macula and is concerned with linear acceleration and deceleration. The semicircular canals and vestibule maintain the kinetic and static balance respectively, thus maintaining the body balances whereas cochlea is the organ of hearing.
AETIOLOGY:
The exact cause of Meniere’s disease is not known but various theories have been postulated as
1. Defective absorption by endolymphatic sac
2. Vasomotor disturbance
3. Allergy
4. Sodium and water retention
5. Hypothyroidism
6. Autoimmune and viral aetiologies

PATHOPHYSIOLOGY:
The membranous Labyrinth is encased by bony Labyrinth, is responsible for hearing and balance of our body. It is filled with a fluid called Endolymph. When there is movement of head, endolymph moves casing nerve receptors in the membranous labyrinth to send the signals to the brain, about the body’s motion.

The pressure and volume changes of the endolymph affect the nerve conduction and in turn affect the balance and hearing. The cause for variation of pressure and volume of endolymph is unknown, but it is noted that increased production of endolymph or decreased absorption or both may lead to the distention of endolymphatic system.

The distended endolymphatic system affects the cochlear duct, the saccule and semicircular canals. The dilated cochlear duct may fill completely the Scala Vestibule which interferes with hearing leading to diminished hearing and tinnitus. The distended Utricle, Saccule and Semicircular canals may show disturbance in maintaining the body balance leading to Vertigo. Thus the triad symptoms are experienced by the patients.
CLINICAL FEATURES OF MENIERE’S DISEASE
Meniere’s disease is characterized by sudden and recurrent episodes of vertigo, hearing loss and tinnitus, with episodes often accompanied by deafness, tinnitus, headache and a feeling of fullness in the ears.6

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AYURVEDIC UNDERSTANDING OF MENIERE’S DISEASE:
Shalakya tantra is a branch of Ayurveda where diseases related with Eyes, Ears, Nose, Oral cavity and Head has been explained6. Karna or Sravanendriya is one of the pancha gnanendriya and it is produced by Akasha Mahabhuta. The doshas present in Karna are Vyana Vata and Tarpaka Kapha. Acharya Charaka has explained 4 karnagatha rogas7 and Acharya Susruta has explained 28 karnagatha rogas8. By analyzing the signs and symptoms of Meniere’s disease, it can be correlated to Bhrama and Vataja Karna Roga explained by Acharya Charaka. Karna Nada, Karna Ksveda, Badhirya and Bhrama as explained by Acharya Susruta have similar symptomatology. The general etiological factors for all karna rogas as explained by our Acharyas are:
1. Avashyaya – exposure to cold climate, mist, fog
2. Jalakrida – indulging in water games continuously
3. Karna kandu – repeating itching in ears using any objects
4. Mithya yoga of Shastras – improper use of instruments while examining the ears
5. Noise pollution
6. Untreated Systemic diseases etc…

Acharya Suratha has quoted that the Samprapti and chikitsa of Karnanada, Karna Ksveda and Badhirya are same as the Doshas-Dushya dusti prakara are same. Acharya Sushruta opines that Bhrama is a condition due to Rajas, Pitta and Vata dosha. Madhavakara explains the clinical feature of Bhrama as Chakravat bhramate – the patient experiences spinning movements in head like a wheel and so he loses his balance and bhoomou patati sarvada – keeps falling on the ground repeatedly due to loss of balance as a result of bhramana – spinning of head. Bhrama is also a rasa Dhatu kshaya lakshana10.

Diseases mentioned as karna nada and karna kshweda encompass the symptom of Tinnitus. While Karna nada is due to Vata only, Vata along with Pitta cause Karna kshweda. Karna nada produces symptoms like subjective sensation of hearing of different sounds like of drum beating, percussions, string instruments, blowing of shankha – conch shell, sounds of various birds, frog, whistling sound, snake hissing etc.. Different sounds are produced by Prakupita Vata in karna – ear as a result of various types of Vata dushti karaka nidana sevana11.

Karna kshweda is the condition caused by association of Pitta with Vata which results in sounds that resemble the blowing of wind through the bamboo.

Badhirya is the resultant effect of Kevala vata or Vata along with Kapha. Badhirya is a resultant effect of Dhatu kshaya janya Vata prakopa and / or Kapha Avarana janya Vata prakopa.

The pathogenesis of Meniere’s disease can be understood in two ways as Margavarana janya and Dhatu kshaya.
As obstruction to the flow of endolymph and its absorption is one of the prime postulation behind the pathogenesis of Meniere’s, this can be understood based on the grounds of Margavarana, where aama or dosha may be the cause for obstruction leading to defective absorption and its flow ending up in distention of membranous labyrinth and the cochlear membranes too.

Chronic margavarana leads to dhatu kshaya or some other factors leading to dhatu kshaya may be the cause for degenerative changes in the vestibulo-cochlear nerve thus causing the symptomatology of the disease. And as it is known, margavarana janya conditions are better in prognosis than that of dhatu kshaya janya and the same holds good in the Meniere’s disease also.

**TREATMENT PROTOCOL:**

The disease being a Vata pradhana, Pitta anubandhi dosha dushti janya vyadhi in Kapha sthana, all three doshas should be regarded for during treatment. Being a disease of Kapha sthana and shiras, and being a chronic disorder shodhana being a preferred line of treatment, Nasya should be the first line of treatment with prior kaya shodhana.

Thus treatment may be planned accordingly as below -

Amapachana which can be achieved with Agnivardhaka dravyas like Chitrakadi Vati, Agnitundi vati, Jeerakadi churna, Trikatu churna, etc., based on the dosha pradhanyata and patient condition.

Proper shodhana is advised and Virechana may be preferred. Snehapana with Triphala ghruta, Sukumara ghruta, Guggulu tiktaka ghruta, etc and Virechana with Trivrut lehya. If in case proper shodhana procedure cannot be followed, Sadyovirechana with Gandharvahastadi Eranda taila can also be adapted.

Nasya karma with a shamana bruhrmana pradhana taila like Ksheerabala 101, Dhanvantara 101, etc may be preferred for 7 days. The same may also be advised in the form of Pratimarsha nasya later. If a case of Margavarana janya, Shodhananga nasya may be administered first and later shamana or pratimarsha may be favoured.

Shiropichu being a Indriya tarpana chikitsa and balya, it is advisable to use combinations like Aswagandhabala laukskadi taila, Mahanarayana taila, Jatamansi taila, etc Karnapoorana with Kshara taila or any other teekshna taila may be advised in case of Kapha or other Dosha margavarana janya dushti samprepti.

Rasayanas in the form of Shamanushadhis like Drakshadi lehya, Narasimha rasayana, Jeerakadi lehya, Khanda kushmanda avalehya, Sarivadi Vati. Rasayana may be preferred in the form of Ghruta as Sushruta has clearly stated ghrutapana is rasayana in all Karna gata rogas.

**DISCUSSION**

Meniere’s disease is generally a disease of the middle-aged group and the elderly population where it could be due to the normal physiological process of ageing and because of the predominance of vata dosha in this avastha which goes in favour of Dhatu kshaya janya samprepti.

Erratic life styles, unhealthy eating habits and lack of exercise could contribute towards developing Meniere’s disease based on the Samprapti of Margavarana janya dosha dushti.

The main pathology in Meniere’s disease is the distention of endolymphatic system due to increased volume of endolymph in the inner ear. This can be understood as condition of atipravruti of Tarpaka kapha and by Vimargagamana of Vyana Vata leading to the development of Tinnitus, Hearing loss and Vertigo. Hence the management should aim at neutralizing the Tarpaka Kapha and Vyana vata in Karna.

As said Agni mandya is the prime cause for all diseases, treatment of all diseases should start with correcting Agni and thus Deepana pachana. Meniere’s being a chronic disease and all dosha involved, kaya shodhana should be the preferred line of treatment. Based on the mode of Samprapti, shodhana or bruhrmana nasya may be preferred followed by pratimarsha nasya. As said Nasa hi shiraso dwaram and Nasya is the best line of treatment in all disorders of head and neck, Nasya should be the preferred line of treatment in Meniere’s. Shiropichu being Indriya tarpana should follow shodhana and nasya along with Rasayanas. Based on the symptomatology and specific dosha pradhanyata, shaman chikitsa may be administered. Rasayana aims at correcting dhatu kshaya aided by shaman chiktsa.

**CONCLUSION**

Meniere’s disease is one of the chronic diseases, which is critically diagnosed and poorly treated with increasing incidences even in the Indian society. Symptoms mentioned relate with conditions like Karna nada, Badhihya, Karna kshweda, Bhrama roga. Vata pradhana tridosha and Rajo guna are the prime factors in the causation of Meniere’s disease with its Samprapti revolving around margavarana and dhatu kshaya. Shodhana being sroto shodhaka and Rasayana being dhatu poshaka and...
rejuvenative is a perfect combination in the treatment of chronic disorders like Meniere’s disease. Thus timely assessment and proper treatment measures when adopted will surely bring down the sufferings of patients of Meniere’s disease.

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