

The Role of Yoga and Meditation in the Management of Tinnitus in Ayurvedic Practice- A Review Article

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Abstract - One of the irritating conditions that can drastically lower a patient's quality of life and productivity is tinnitus. Even though it is not a life-threatening condition, emotional discomfort, cognitive difficulty, intrusiveness, auditory and perceptual issues, sleep disturbances, and a variety of somatic ailments are the consequences. Its frequency and prevalence are increasing daily. Anticonvulsants, anxiolytics, antidepressants, muscle relaxants, and other pharmacological drugs are now used or being tested for their pacification, but there is little proof that their benefits outweigh their risks. Also poorly understood is the function of neurostimulation therapies, both invasive and non-invasive. Cochlear implantation and the development of hearing aids have not shown, particularly clear results. Ayurveda has its wings over almost all illnesses of today even though it is a centuries-old tradition. Tinnitus has become a common disease among youngsters as well as the aged, which demands an effective solution so in this article Role of Yoga and Meditation in the Management of Tinnitus in Ayurvedic Practice given.

Keywords - Tinnitus ,Karnanada, Yoga , Meditation

INTRODUCTION

Tinnitus is a common problem encountered in primary care, characterized by the conscious awareness of a sound in the absence of an external auditory stimulus and strongly associated with sensorineural hearing loss. The high prevalence of tinnitus indicates that the

disorder is a global burden. Although the prevalence estimates depend on how tinnitus is defined within surveys, approximately 12%-30% of the general population worldwide experiences tinnitus. Hearing loss is a major cause of tinnitus and a substantial public health issue, with the World Health Organization estimating that over 466 million people globally have severe hearing loss. The severity of tinnitus is heterogeneous, ranging from mildly bothersome to extremely disruptive. Tinnitus symptoms can be unilateral or bilateral and may present with or without hearing loss.¹⁻³ The sounds that patients perceive can resemble ringing, hissing, whistling, humming, buzzing, chirping, or clicking. Tinnitus can be qualitatively categorized as nonpulsatile (typically subjective) or pulsatile (often objective). Subjective nonpulsatile tinnitus is the most common type and is only heard by the patient, whereas objective pulsatile tinnitus can sometimes be heard by an observer and is caused by an internal bodily vibration or noise. Tinnitus is a symptom that may arise as a result of various changes in the auditory system. People with bothersome tinnitus perceive it as an unpleasant, distressing signal that negatively affects their quality of life, is associated with anxiety and depression, and may last a lifetime. In addition to the individual burden of hearing loss, which includes impaired communication, social isolation, increased prevalence of depression and anxiety, and cognitive decline,

hearing loss also imposes a significant global economic.⁴ Tinnitus denotes a condition wherein persons perceive sound, in ears or in the head, even when there is no external stimulation. It is an auditory disorder seen in 10–15% of the world population, many a times with psychological consequences⁵. However, a lower prevalence of 6.7% is reported for the Indian adult population⁶. Tinnitus is characterized as ringing, buzzing or whistling sound. Persons suffering from tinnitus are often depressed, irritable, insomniac, and/or have poor quality of life. It has been hypothesized that there is a relationship between tinnitus, on the one hand and the activity of the auditory and limbic systems, on the other hand⁷. Symptoms like depression, anxiety and other psychological problems are seen in persons with tinnitus because the limbic system of the brain is related to emotions⁸.

Purvarupa

Purvarupa indicates the upcoming disease. Stage of Sthanasamsraya is term as Purvarupa. In stage of Sthanasamsraya vitiated gets aggravated and move to different parts and get accumulated is one of the region of the body. In classical literature there is no specific Purvarupa (prodromal symptoms) are mentioned in disease of Karnanada. Acarya Madhavakara explain Purvarupa as precursor of Rupa Laksanas with less intensity, which could be taken as less intensity of sound in ear, or shorter duration or intermittent frequency be considered as Purvarupa of Karnanada. Acarya Caraka explain are; Avyakta Laksanam Tesam Purvarupama Iti Smrtama. Ca. Cl. 28/19 Avyakta Laksanas (means unknown symptom) are the Purvarupa of Vata Vyadhi

Rupa

Nanavidha Sabda- Different kinds of sounds heard in Savdavaha Srotas. Vividhan Sabda is heard in Savdavaha Srotas are as follow: Bher, Mrudanga, Samkha, Bhrungara, Kounca, Mandura, Tantri, Vividha Sabda etc⁹

Samprapti

Samprapti is the process of manifestation of the disease by the morbid Dosa which are circulating all over the body. When the Vata gets,localised in the channels of the ear the patient hears ,various types of

sound like those of a Bheri (bulge/drum), Mrudanga, Samkha etc.

Cikitsa of Karnanada

The Karnanada is a Vataja Pradhana Dosa Vyadhi. So our aims are to reduce Vata in the treatment of Karnanada. Acarya Susruta mentioned the common treatment for Karnasula, Karnanada,Badhirya and Karnaksweda roga.

Causes of tinnitus

Main causes of subjective tinnitus

Otologic problem and hearing loss: Loud noise, presbycusis, Meniere's disease, acoustic neuroma, external ear infection.

Pharmacological Causes

Analgesics, antibiotics, chemotherapy and anti-viral drugs, loop diuretics, anti-depressants, psychedelic drugs (5-MeO-DET, 5-Methoxy-

diisopropyltryptamine, diisopropyltryptamine, harmaline, N, N-dimethyltryptamine, psilocybin, salvinorin A). Neurologic disorders: Traumatic brain injury meningitis, encephalitis, strokes, multiple sclerosis, chiari malformation, auditory nerve injury.

Metabolic Disorders: Thyroid disorders, hyperlipidemia, vitamin B12 deficiency, iron deficiency, anemia.

Psychiatric Disorders: Anxious and depressive states.

Other: Tension myositis syndrome, fibromyalgia, head and neck muscle spasm, Temporomandibular joint disorders, thoracic outlet syndrome, lyme disease, hypnagogia, sleep paralysis, glomus tympanicum, herpes infections.

Main causes of objective tinnitus: Pulsatile tinnitus:

Altered blood flow or increased blood turbulence near the ear: Atherosclerosis, venous hum, carotid artery aneurysm, carotid artery dissection.Muscle contraction that cause clicks or crackling around the middle ear.

Pathophysiology

The changes in the auditory nervous system, especially at the dorsal (DCN) and ventral cochlear nucleus (VCN) underpinning tinnitus are often represented by a reduction in the inhibitory rather than an excitatory input, resulting in a shift in the balance between inhibition and excitation.

Deprivation of input may cause neural plasticity to change the relationship between inhibition and excitation and protein synthesis and finally impact on neurotransmission especially at the DCN, the inferior colliculus (IC), together with the primary and secondary auditory cortices eventually affecting the thalamic and dorsal cortex transmission, the amygdala, and other structures. The rerouting of information may cause structures of the central nervous system (CNS) that are not normally involved in processing auditory information to become activated by sound stimulation (i.e., the abnormal involvement of the non-classical-non-specific/extralemniscal pathways). Yet to date, no univocal or exhaustive appreciation of tinnitus determining neural abnormalities have been reached; with its pathophysiological correlates still remaining debated issue. Among others, the following evidence and hypotheses have been postulated.

Modern management of Tinnitus

The exact pathophysiology of tinnitus is unknown; therefore, tinnitus treatments focused on symptomatic relief. Some medications are prescribed to relieve the associated symptoms of the tinnitus, such as depression, anxiety or insomnia, whereas some agents are applied for changing the pathophysiology. Lidocaine, benzodiazepines, antidepressants, anticonvulsants and antiglutamatergic agents target the neural activity underlying tinnitus. Others, such as systemic and intratympanic steroids, like ginkgo biloba, and melatonin, have anti-inflammatory, vasodilator or antioxidant effects on cochlea and neural pathways. Also, in addition to pharmacological treatment, various treatment modalities have been used for subjective tinnitus, such as sound therapy, cognitive behavioral therapy, acupuncture, etc.

DISCUSSION

Yoga and Pranayama: Incorporation of yoga asanas and pranayama techniques to improve circulation, reduce stress, and enhance overall well-being. Yoga and meditation can be valuable components of a holistic approach to managing tinnitus by promoting relaxation, reducing stress, and enhancing overall well-being. While they may not directly address the physiological causes of tinnitus, they can help

individuals cope with the condition more effectively and improve their quality of life. Here are some yoga practices and meditation techniques that may be beneficial for managing tinnitus:

Yoga Asanas (Poses):

Shavasana (Corpse Pose): Shavasana is a relaxation pose that helps calm the mind and relax the body. Lie flat on your back with your arms by your sides, palms facing up, and legs slightly apart. Close your eyes and focus on your breath, allowing your body to completely relax.

Bhramari Pranayama (Bee Breath): Bhramari Pranayama involves making a humming sound similar to the buzzing of a bee while breathing. Sit comfortably with your eyes closed. Inhale deeply through your nose and exhale while making a gentle humming sound, feeling the vibration in your head and ears. Repeat several times.

Viparita Karani (Legs-Up-the-Wall Pose): Viparita Karani is a restorative inversion pose that promotes relaxation and relieves stress. Lie on your back with your legs extended upward against a wall, forming a right angle with your torso. Keep your arms relaxed by your sides. Close your eyes and focus on your breath as you relax into the pose.

Matsyasana (Fish Pose): Matsyasana stretches the neck and throat muscles, promoting circulation and relieving tension. Lie on your back with your legs extended and your arms alongside your body. Place your hands under your buttocks, palms facing down. Press your forearms and elbows into the floor as you lift your chest toward the ceiling, arching your back. Keep your head tilted back and gaze toward the ceiling.

Meditation Techniques:

Mindfulness Meditation:

Mindfulness meditation involves paying attention to the present moment without judgment.

Find a quiet and comfortable place to sit. Close your eyes and focus on your breath, observing each inhalation and exhalation. When your mind wanders, gently bring your focus back to your breath.

Mantra Meditation:

Mantra meditation involves repeating a calming word or phrase (mantra) silently or aloud to focus the mind and induce relaxation.

Choose a simple and soothing mantra such as “Om” or “So Hum.” Sit comfortably, close your eyes, and repeat the mantra mentally or vocally with each breath.

Yoga Nidra (Yogic Sleep):

Yoga Nidra is a guided relaxation technique that induces a state of deep relaxation while maintaining awareness.

Lie down in a comfortable position, close your eyes, and follow a guided Yoga Nidra practice that directs your awareness to different parts of the body, breath, and sensations.

Incorporating these yoga asanas and meditation techniques into your daily routine can help reduce stress, promote relaxation, and enhance your ability to cope with tinnitus. However, it's essential to practice them consistently and seek guidance from a qualified yoga instructor or meditation teacher, especially if you're new to these practices or have specific health concerns. Additionally, combining yoga and meditation with other holistic approaches such as Ayurveda and sound therapy may offer comprehensive support for managing tinnitus.

The Role of Lifestyle Modifications in Tinnitus Management

1. Stress Reduction-Engaging in relaxing activities like yoga, meditation, and deep breathing to lower stress levels.
2. Dietary Changes-Avoiding stimulants, caffeine, and certain foods that may exacerbate tinnitus symptoms.
3. Sound Enrichment-Using background noise or music to mask the ringing in the ears.
4. Sleep Hygiene-Establishing a consistent sleep routine and creating a restful sleep environment.

CONCLUSION

Yoga and meditation helps improve circulation, which has been linked to a healthy auditory system. Recent studies have found that practicing yoga can help reduce tinnitus – a condition that causes ringing, whistling, buzzing or humming in the ears. While there is no cure for tinnitus, yoga and meditation is just one of the many options for helping reduce symptoms. In the management of tinnitus, the integration of Ayurvedic yoga and meditation

practices offers a holistic approach to address the mind-body connection and achieve lasting relief.

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