A Clinical Study of Massaging Pressure Therapy for Management of Sensoryneural Hearing Loss

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Abstract: Hearing loss and deafness is a disability affecting millions of people. Hearing aids and cochlear implants are the only available solutions to overcome this disability. They are at best sophisticated amplifiers of sound and nothing beyond it. The objective was to test if Massaging Pressure Therapy in addition to nerve enhancing Homeopathic medicines could positively benefit those suffering from sensorynueral hearing loss. The patients were from a large cross section with varied ages, symptoms and causes of hearing loss and were suffering from mild to profound hearing losses due to various congenital and acquired impairments in the middle & inner ear and diagnosed as sensory neural hearing loss Clinical trials were conducted with diagnosis based on pre audiometry tests which determined the hearing thresholds. The therapy involved massaging the temperoparietal region with a small steel sick to activate the nerve cells in the cochlea. The outcome was measured in decibel levels denoting hearing thresholds. Pre audiometry and post audiometry reports were compared to arrive at the result. An average was calculated for 2142 patients for each major cause reviewed and a consolidated report was also arrived at. Of the 2412 patients the therapy was carried out on, a 28% reduction in hearing threshold was observed. It was concluded that massaging pressure therapy in addition to nerve enhancing homeopathic medicines comes across as a viable solution requiring no external aids and showing considerable improvement in the hearing. Limitations of Massage pressure therapy include otitis media, tinnitus, and most congenital cases of deafness. It was also observed that healthy individuals with a positive frame of mind gained more benefits than those with weak immune systems.

Keywords: Alternative therapy for hearing loss, Homeopathic treatment for sudden Deafness/Hearing loss, Massaging pressure therapy for Sensory neural deafness/hearing loss S N H L, Hearing Impairment.

1. Introduction:

I. Introduction

Deafness accounts to one of the major disabilities that hamper the day to day

running of a life. About 6.3 million¹ people are affected by some kind of hearing disorder in India. With a lack of interpreters and proper medical care the deaf are often left to fend for themselves. This inability to understand and communicate results in very little social activity which may lead to depression and other related issues. The use of hearing aids can be cumbersome and expensive and only a few living in the urban areas have access to it. Eighty percent (80%) of current owners wear two hearing aids and it is estimated that ninety-five percent (95%) of those with a hearing loss may need a binaural fitting.² In this context providing an alternative cure for deafness that eliminates the need for a hearing loss, various lifestyle related disorders such as diabetes³, hypertension, passive smoking⁴ sleep Apnea⁵ and stress may also lead to hearing loss. And as there is a rise in these diseases there is also an increase in cases of deafness. High levels of cotinine, the chemical that indicates exposure to tobacco smoke and second-hand smoke has been directly linked to higher risks of some types of hearing loss. The excessive use of mobile phones was also observed as one of the rising causes of deafness⁶

Often patients with mild to moderate hearing loss avoid going to the doctor for the stigma attached to it. In this scenario identifying hearing loss can be the first step towards correcting it.

The practice of using touch as a healing method derives from customs and techniques rooted in ancient history. Civilizations in the East and West found that natural healing and <u>massage</u> could heal injuries, relieve pain, and prevent and cure illnesses. It helped reduce stress and produce deep relaxation. Massage therapy began as a sacred system of natural healing. However, cultural shifts rendered it a disreputable form of indulgence for extensive periods of history. Enduring these turns, massage has experienced resurgence in modern times. Today, <u>massage therapy</u> stands as a highly respected <u>holistic healing</u> method practiced across the world⁸ Carrying on from the idea first suggested by Dr. Samuel Hahneman⁹, Hon^{1*} has found that massaging pressure therapy shows considerable help to those suffering from Sensory Neural hearing disorders. Massaging Pressure Therapy (MPT) a relatively new development in medical treatment enables deaf people to once again receive the sensation of sound (unlike hearing aids) which make sound louder. MPT stimulates the auditory nerve, hair cells

and there by produce a sensation of sound in different ways. To further understand the concept of massaging pressure therapy let us study the human ear. The human ear is a complex organ divided into three main parts viz. the outer ear, the middle ear and the inner ear. Sound waves collected by the outer ear are channeled along the ear canal to the eardrum. When sound waves hit the eardrum, the impact creates vibration, which in turn causes three bones in the middle ear to move. The smallest of these bones, the stapes, fits into the oval window between the middle and the inner ear. When the oval window vibrates, fluid in the inner ear transmits these vibrations to a delicate snail shape structure called the cochlea. The bending of hair cells in the cochlea sets off nerve impulses, which pass through the auditory nerve to the hearing center of the brain. Here it is translated into signals the brain can recognize. Any anomaly in this process are cause complete or partial hearing loss.

Depending on the cause, hearing loss can be broadly classified into two types

1.1 CONDUCTIVE HEARING LOSS (CHL)-This is caused due to injury or problems with the bones, eardrum or membranes which transmit sound from the external and middle ear to the inner ear. This type of loss can be usually overcome by medication or surgery. Specific causes of Conductive hearing loss¹⁰ are-Obstruction of ear canal due to wax, foreign bodies etc., Perforation of Tympanic membrane due to hair pins, match stick etc. Ossicular interruption with intact eardrum Ossicular interruption with perforation, Closure of oval window, Sudden change in ear pressure due to a slap etc. Fracture in temporal bone. Even after the root cause is identified and treated, the inner ear may be affected indirectly by the trauma to the outer ear which may result in decreased hearing.

1.2 SENSORY NEURAL HEARING LOSS (SNHL)- SNHL is one of the most commonly occurring hearing disorders which requires the need of a hearing aid. People afflicted with SNHL have reduced sensitivity to sound and will need other people to speak louder to understand what is being said. TV and music systems will also be tuned to a higher volume. Other symptoms may include high pitched voices like that of women and children being lost and difficulty in hearing at public gatherings, theatres where the source of sound is distant. Sensorineural hearing loss can be mild, moderate, or severe, including total deafness. The chief causes of Sensory neural hearing loss are exposure to constant noise, Trauma/Injury, Genetic Causes, Natural Ageing Process, Tumors, Congenital defects, Illness, Middle Ear Infection, ototoxic drugs, overuse of antibiotics, Meniear's disease, sudden hearing loss, systemic disorder like hepatitis, migraine, brain tumour etc. Diabetes, Hypertension, Stress, recurring rhinitis, etc. Most of the cases received for treatment of Sensorineural hearing loss are lifestyle related. Working in places with high decibels of noise and constant exposure to mobile phones along with the growing noise pollution also results in decreased hearing. Stress related conditions such as diabetes and hypertension also aggravate hearing issues. The majority of human sensoryneural hearing loss¹¹ is caused by abnormalities in the hair cells of the organ of Corti in the cochlea. There are also very unusual sensorineural hearing impairments that involve the eighth cranial nerve (the vestibulocochlear nerve) or the auditory portions of the brain. In the rarest of these sorts of hearing loss, only the auditory centers of the brain are affected. In this situation, Cortical deafness, sounds may be heard at normal thresholds, but the quality of the sound perceived is so poor that speech cannot be understood. Most sensory hearing loss as mentioned above is due to poor hair cell function. The hair cells may be abnormal at birth, or damaged during the lifetime of an individual. There are both external causes of damage, like noise trauma and infection, and intrinsic abnormalities, like deafness genes. Sensory hearing loss that results from abnormalities of the central auditory system in the brain is called central hearing impairment. Since the auditory pathways cross back and forth on both sides of the brain, deafness from a central cause is unusual.

Massage Pressure Therapy (MPT) as the name suggests is a therapy involving the massage of outer ear to stimulate the inner ear resulting in enhanced hearing. Nerve cells in the cochlea are responsible for converting the vibrations received from the middle ear into impulses that are then sent to the brain. MPT rejuvenates these nerve cells and restores hearing. Contrary to the belief that dead cells of cochlea and auditory nerve cannot be restored, it was found that MPT considerably brings back the cells to function properly and depending on the psychology and general body health, varying degrees of improvement in hearing are noticed. It was also observed in some cases that despite the proper function of nerve cells the electrical impulses were not being generated to the optimum. In such cases too MPT was seen to improve capacity of electrical impulses. Massage pressure therapy was followed up with nerve enhancing Homeopathic medicines. The chief therapeutic principle in massage therapy is -Promoting the flow of life force (qi) and blood circulation relaxing muscles and tendons and removing obstruction from the channel.

II. Methods And Materials

2. Methods and materials

This research was carried on over a period of 7 years and involved about 2142 patients most of who responded positively. These patients were from five different cities of India and suffered from varying degrees of deafness showing varied symptoms and with different causes (fig 1) for hearing loss. The objective was to test if massaging pressure therapy in addition to nerve enhancing Homeopathic medicines had could positively benefit those suffering from sensorynueral hearing loss. All kinds of hearing impairment were reviewed and the ages of the patients ranged from 6yrs to over 90 yrs. The setting for the research were Dr Hon's^{*1} clinics at various centres across India. Consent forms for Massaging pressure Therapy were signed by every patient before the treatment.

The diagnosis was based on the history of the patient, a severity test to judge the hearing loss as mild, moderate and moderate to profound and site of lesion(Cochlea, retro cochlea or central). Audiology Bera & Ecocha, ASSR, X- ray, trauma, malignancy, diabetes, hyperthyroidism and kidney function tests were carried out before therapy. Apart from the physiology tests, factors such as general body health, a positive frame of mind and emotional stability played a vital role in the selection of the patients.

Those suffering from SNHL were identified and a pre audiometry test was carried out on an audiometry machine and line graphs depicting the hearing thresholds in right and left ear were marked. Patients suffering from conductive hearing loss were first treated for problems in the outer ear.

After the pre audiometry test is carried out the first step is identifying the precise spot on the skull(temperoparietal region) where the blockage is suspected and then by using a jimmy (steel stick) controlled pressure is applied on these points which results in the flow of energy and blood circulation in audio pathways and channels is restored and revived. The method involves massaging the Temperoparietal region with a jimmy (steel stick). After three days of these sessions of 5-10 mins each depending on the patient's response and post audiometry test results, therapy was either extended for a longer time or stopped with follow up visits and medicines given for sustained hearing. Post Audiometry test results were once again marked on the graph and hearing thresholds were compared independently for both ears.

2.1 Statistical measures: Average threshold levels of 2142 patients (fig 2) were considered from preaudiometry and post audiometry test results (hearing thresholds) of individual patients separately for left and right ears which were marked in decibels (dB) from 120dB to -30dB on the Y axis and frequency in Hertz (hz) on the X axis ranging from 120-6000hz where 20-30dB being the normal range and upto 120dB being the highest possible hearing threshold (fig 3). Hearing thresholds beyond 30dB were identified as mild hearing loss and so on.

Massaging pressure therapy was tested on both pre-lingual (congenital or long term deafness) and post-lingual(recently acquired deafness) patients.

Massage Pressure Therapy was then followed by nerve enhancing homeopathic medicines such as 1. Kalimur - 200

2. Kaliphos -200

3. Belladona -200

4. Elaps -200

5. Chona Podium -200

6. Silecia -200

Listening to music at least an hour a day, regular meditation and not putting any sharp object or nonprescription medicine in the ear were advised to sustain the effects of Massage pressure therapy.

III. Results

3. Results:

Pre audiometry tests taken before Massaging pressure therapy and post audiometry tests showed an average 28% improvement in hearing thresholds. (TABLE 1)

A growing and rather worrying pattern of lifestyle induced deafness such as deafness induced by Hypertension and diabetes and enhanced levels of noise pollution was observed though it was easiest to manage and showed better improvement than congenital and age related hearing issues.(fig 4)

3.1 Effects of MPT on pre-lingual and post lingual hearing loss:-

It was observed that the duration from onset of deafness to beginning of the treatment played a vital role in the results. Patients afflicted with pre-lingual hearing loss and those suffering from deafness for more than six years showed lesser improvement than those having Post lingual or recently acquired deafness.

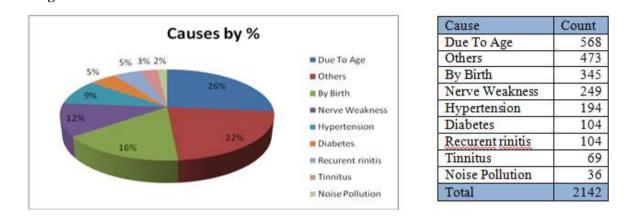
Patients with post lingual deafness showed remarkable improvement in just three days while those with pre lingual deafness showed slow improvement and needed therapy for a longer period of time.

Limitations of Massage pressure therapy include Otitis media, and most congenital cases of deafness (though some cases showed marked improvement).

It was also observed that healthy individuals with a positive frame of mind gained more benefits than those with weak immune systems.

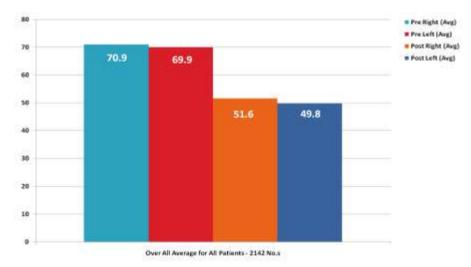
The medicines mentioned above were prescribed for a period of one month with daily doses.

IV. Figures And Tables

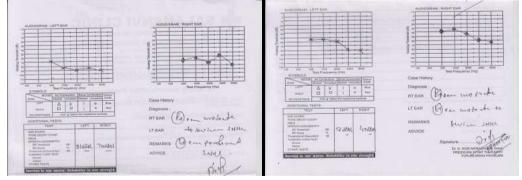


4.1 The graph shows the various causes of deafness reviewed for the study in percentage.

4. Figures and tables



4.2 Graph showing the overall average decrease in hearing threshold levels among 2142 patients

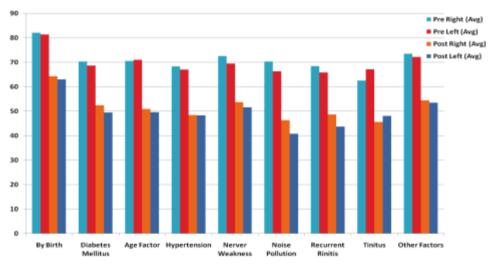


4.3 A sample pre- audiometry and post audiometry report. (TABLE1) AVERAGE PREAUDIOMETRY & POST AUDIOMETRY RESULTS GIVEN IN DB Average preaudiometry & post audiometry results given in dB

age preaudiometry & post audiometry results given in db							
	No. of patients	Pre	audiometry	Post audiometry		% difference in hearing	
		hearing threshold in		hearing threshold in		threshold	
		dB		dB			
F	2142	Lt ear	Rt ear	Lt ear	Rt ear	Lt ear	Rt ear
		69.9	70.9	49.8	51.6	28.75%	27.22%

*Percentage value taken up to two decimal pts.

4.4 The graph shows an effective decrease in the hearing thresholds with Y axis representing the average decibel levels in each category



5. Conclusion

V. Conclusion

The conventional method of treating SNHL has always been either a hearing aid (with limited success or of no use in severe cases of SNHL) or a cochlear implant which requires major and expensive surgery where a hearing aid is implanted inside the cochlea and powered by batteries and magnets fixed outside the skull behind the ear followed by a long process of rehabilitation(speech therapy and relearning of hearing which may take a couple of months) and most of the patients we received were advised the same by ENT specialists. Through Massaging Pressure therapy blockages (Ethalic Patches) are removed and the patient's energy is positively channelized. As indicated by the result Massage pressure therapy regenerates the hair cells in the cochlea and renews hearing in cases of sensory neural hearing loss. Hearing aids thought to be the only solution for SNHL work only if the nerves have some reserved power to carry electromagnetic signals to the brain, therefore in extreme cases of SNHL even the best Hearing aid will be of little or no use.

Inner ear cell regeneration has the potential to be the newest advancement for curing hearing loss¹². There are two challenges with inner ear cell regeneration: rebuilding the damaged ear cells and reconnecting the cells to the nerve fiber, which will allow for sound information to be sent to the brain ¹³. The challenges mentioned above still remain challenges and there is widespread research going on in this field. One such research is into Sound therapy¹⁴, which once again proves that regeneration of inner ear cells can offer an alternative and permanent solution for SNHL. Variable frequencies of sounds are used to stimulate the inner ear cells resulting in reduced hearing thresholds.

Further research and use of Massaging pressure therapy can lead to a long term, comprehensive and a viable solution for Sensoryneural hearing Loss and it can be positively concluded that Massage pressure therapy for management of Sensoryneural hearing loss can prove to be an alternative to hearing aids and can provide long term relief to patients.

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6. Acknowledgements:

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