



Neurological disorders

“When man speaks, he speaks with his entire body and it is the body that acquires, absorbs and memorises the structures and information necessary for speech to occur” Alfred Tomatis

Motor Development Delay, Stroke, Epilepsy

The ears have an important role to play in the foundation of the entire nervous system. In fact, the ear is vital for both physiological and emotional development from the embryonic stage onward. The vestibular system gives us “body image”.

Only when the vestibule maintains a good motor control, balance and verticality, will the other part of the inner ear, the cochlea, be able to perceive and analyse sounds well enough to induce the desire to really listen. People with motor delay will have great difficulty doing this. It requires enormous effort. Through Listening Training the vital parts of the inner ear are stimulated to such an extent that the ears are 'forced' to function properly. There is noted improvement in muscle tone, head posture, posture as a whole, as well as in balance and coordination. In parallel with motor progress, the ability to listen increases, i.e. concentration, discrimination of sounds and attention-span. It often occurs that these clients start to pick up and repeat sounds they had never perceived before in their lives. This opens the door to language and communication and will most certainly improve their experience of what life has to offer.

Epilepsy

The function of the ear is not limited to just hearing - in fact one could say that hearing comes after perhaps even more important functions of the ears. First of all the ears energise the brain; secondly they control posture and induce good verticality, essential characteristics for listening not just hearing. Experience with those who have epileptic fits have shown that over a period of time - often between 60 and 90 hours of training - fits become less violent and less frequent. Some people recuperate much faster than before and sometimes come off medication. On a physiological level the treatment balances the response of the two ears and indirectly the level of energy going to the two hemispheres of the brain. On an emotional level the sessions have a deep relaxing effect. In cases where the fits are stress-related, clients learn to adopt a different attitude. Instead of 'getting a fit' they learn a more 'mature' way to face frustration and anxiety. They become more communicative and alert and have a better understanding of the past and a more positive attitude towards the future.

"The power of music to integrate and cure... is quite fundamental. It is the profoundest non-chemical medication "
Oliver Sachs (Awakenings)

Stroke and other Neurological Disorders

Over the last half century, music therapy has made tremendous strides as a scientific discipline. Music therapists work in hospitals, rehabilitation centres, nursing homes, prisons and schools. Research is still going on but it is believed that music can shorten the time to recovery of neural functions by promoting nerve cell regeneration and by directing the establishment of new neural pathways and connections. It is as if music is able to trigger the compensatory mechanisms - the so-called neural plasticity - that can help a person to recover from stroke or other brain damage. Don Campbell, author of *The Mozart*

Effect, put it this way: "The nervous system is like a symphony orchestra with different rhythms, melodies and instrumentations, meant to keep the brain synchronised. When there is damage, these natural rhythms get disturbed and neurons may fire at the wrong time or not at all. External music, movement and images can bring the "neurological music" back in tune. " Listening Training can be an effective way to jump-start that process, particularly because of the intensity in stimulation and the use of the bone conductor, the small vibrator integrated in the headphones. Even with severe brain injuries, improvements have been observed. There is almost always some potential there that is not fully utilised. That goes for all of us.