

Auditory and visual attention process training for tinnitus treatment

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This research will determine the importance of attention in tinnitus perception, and the value of auditory and visual attention process training in reducing tinnitus. We believe that abnormal attention and auditory scene analysis determines the severity of tinnitus, and the incongruence between tinnitus and normal auditory perception is responsible for its resistance to traditional sound based habituation therapies. Sensory gating of auditory evoked potentials will be investigated as parameter of early auditory selection to identify deficits in attention in tinnitus sufferers. New methods of treatment using auditory and visual attention process training (AVAPT) will be implemented in groups of tinnitus sufferers: The training utilizes auditory and visual distraction tasks installed on a hand held computer. The person with tinnitus uses the training 30 minutes per day, as they become better at the task its difficulty increases reducing attention to tinnitus and eventually its perception. Attention training has been demonstrated to improve subjects ability to attend to relevant sounds while ignoring distractors. The main aim of the study is to determine the effectiveness of excitatory, inhibitory, auditory and visual distractors in training persons with tinnitus to not perceive tinnitus. It is believed that this training will result in permanent reduction in tinnitus through a process of learning-related plasticity.

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