

CAN SOMATIC TESTING IDENTIFY SUBJECTS WHOSE TINNITUS CAN BE SUPPRESSED BY SPECIFIC TREATMENTS?

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Well designed studies have established that the somatosensory system of the upper cervical region and head are closely related to tinnitus. Tinnitus can arise de novo from a disorder of the head and upper neck through activation of the somatosensory system. Whether or not they have a functioning cochlea, "somatic testing" (a series of strong muscle contractions of the head and neck) can (1) modulate the tinnitus percept of about 80% of people with ongoing tinnitus, and (2) elicit a sound percept in about 50% of people with no tinnitus. Animal studies have elucidated the likely neural pathway underlying these somatic phenomena.

Because somatic modulation is a fundamental property of tinnitus, somatic testing should be incorporated into all evaluations of tinnitus (1) to improve our understanding of the role of the somatosensory system in any patient and (2) to identify subgroups of tinnitus patients who may respond to a particular treatment modality. Treatment modalities that (a) appear to involve the somatosensory system and (2) have been reported to provide long term tinnitus suppression in some tinnitus subjects should particularly be restudied with somatic testing, since somatic testing may be the key to identifying the subgroup of responders.

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