

# **Tinnitus Sensitization: a neurophysiological pathway of chronic complex tinnitus**

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## **Summary**

A novel neuro- and psychophysiological pathway for central cognition of tinnitus, i.e. tinnitus sensitization, is presented here. As a complement to the neurophysiological pathway for the conditioned reflex according to Jastreboff, which permits therapeutic procedures to bring about an extinction of the tinnitus (e.g. by the acoustic tinnitus retraining therapy), sensitization can be treated with procedures that act at the cognitive level. Since on the one hand therapeutic extinction procedures (e.g. the therapeutic application of sound) are still to be proven effective in controlled studies, while on the other cognitive interventions such as cognitive behavioral therapies have in fact acquired evidence level IIa in prospective studies, it is indeed appropriate to discuss whether the earlier neurophysiological model of a conditioned reflex is sufficient on its own, and whether in fact it needs to be complemented with the sensitization model.