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**Personalized approach in the treatment of tinnitus and insomnia:
combining repetitive transcranial magnetic stimulation and
cognitive behavioral therapy**

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Abstract

We present the case of a 53-year-old male patient who had been suffering from symptoms of decompensated and chronified tinnitus for 4 years [1], most likely caused by work stress. In addition, the patient developed comorbid decompensated insomnia. Because of potential bidirectional connections between tinnitus and sleep disorders, an interdisciplinary approach to treatment was chosen. The treatment plan

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we developed consisted of ten sessions of repetitive transcranial magnetic stimulation (rTMS) for tinnitus [2], followed by ten sessions of cognitive behavioral therapy (CBT) for tinnitus and insomnia. We used the Tinnitus Questionnaire (TF) to assess tinnitus severity, the Beck Depression Inventory (BDI-II) for depressive symptoms, and the WHO Well-Being Index (WHO-5) for subjective well-being. Improvements were achieved with regard to everyday functioning, as the patient went from decompensated and severe to clinically negligible TF scores, from minimal to no depressive symptoms, and from just above critical to above average well-being. Combining equipment-based and psychological approaches to treatment proved successful in this case. We conclude that a combination of rTMS and CBT may be considered as an effective treatment for chronic tinnitus and comorbid sleep disorders.

References

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