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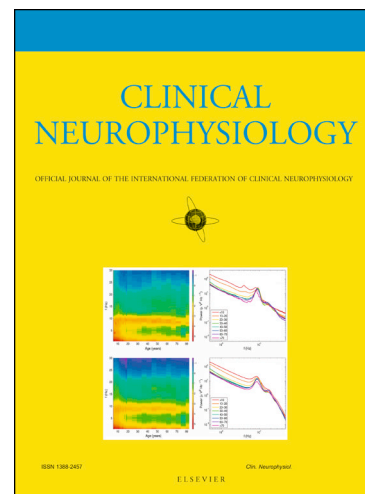
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Correlation between deep brain stimulation effects on freezing of gait and audio-spinal reflex

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Highlights

- Audio-spinal reflex is increased by STN DBS in PD patients, *irrespective of drug therapy*.
- *There is an inverse correlation between this increase and burden of freezing of gait (FOG) in PD patients.*
- Audio-spinal reflex might be used to assess different stimulation strategies aimed *at reducing* FOG.

Abstract

Objective. A network of cortical, subcortical and brainstem structures might be involved in freezing of gait (FOG). Subthalamic nucleus (STN) deep brain stimulation (DBS) could modulate this network. The audio-spinal reflex (ASR), reduced in PD, but increased by treatment, can be used to further investigate that locomotor network. The aim of this study is to find whether a correlation exists between ASR and FOG in PD patients under DBS.

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