

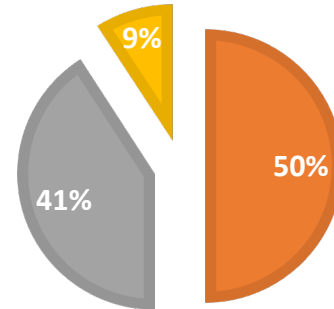
Background

Transcranial Pulse Stimulation (TPS) is an alternative non-drug therapeutic concept for the treatment of patients with Alzheimer's Disease (AD) which is based on low-energy shock waves.

In a sham-controlled study improved CERAD scores and effects in functional magnetic resonance imaging (fMRI) in AD patients and healthy controls have been reported, albeit by one group only. [1]

MEDICAL OUTCOME

■ No Change/ Stable ■ Improvement
■ No evaluation



Results

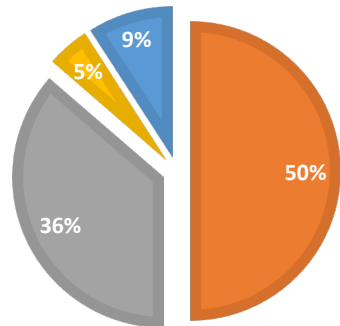
The cognitive outcome remained stable or improved in 76%, while worsening of cognitive performance was noted in 5%. The treatment was very well tolerable; no side effects occurred and no subjective complains were raised.

Conclusion

Overall, the global clinical impression and the cognitive performance were at least stable after 6 months, suggesting that TPS could stabilize cognitive performance and merits further long-term investigations in AD and related conditions (e.g. DLB).

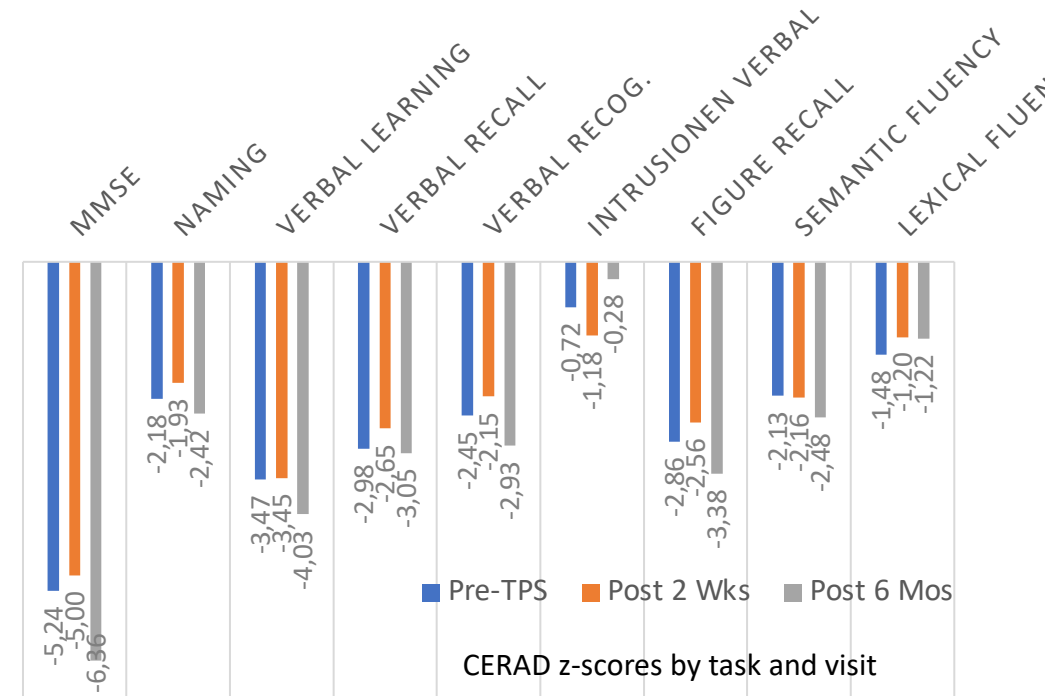
COGNITIVE OUTCOME

■ No Change/ Stable ■ Improvement
■ Worse performance ■ No evaluation



Methods

We retrospectively analyzed data of 22 AD patients treated with TPS. TPS treatment consisted of six initial TPS sessions within 2 weeks as well as single refreshment sessions after 6, 12, 18 and 24 weeks. A total of 6000 pulses with 0.25mJ/mm² and 4Hz per session were applied: 1600 pulses bifrontally, 800 pulses biparietally, and 1200 pulses to the precuneus using NEUROLITH®. Neuropsychological testing has been performed before and after the initial cycle of TPS, and after six months using CERAD Plus.



References

[1] Cheung, T, & Beisteiner, R (2022). Int J Environ Res Public Health, 19(23):15614

Disclosure of Interest

BK received travel reimbursement by Storz Medical.