Safety and Tolerability of Transcranial Direct Current Stimulation for Persons With Aphasia: A Randomized Controlled Pilot Trial

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INTRODUCTION

- Aphasia- a neurogenic communication disorder
- tDCS- An adjunct technique for SLT
- RCT shows efficacy of tDCS for PWA

NEED FOR THE STUDY

Lack of quantitative measures for safety (Han et al., 2024)

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No RCTs specifically on safety and tolerability

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No studies in the Indian context (Sun et al., 2024)

AIM

To find the ***safety and tolerability*** of tDCS combined with SLT in PWA

METHOD

Design: Double-blinded RCT pilot

Participants : 10 PWA: Group I Active ; Group II Sham)

Screening for tES; Sensation measures (Antal et al., 2017); Wong Baker pain scale

tDCS + SLT (1 hour): 1mA; 20 minutes; Anode: Left IFG; Cathode: CSOR; 15 days

Analysis: Average, descriptive statistics; effect size and sample estimation

RESULTS & DISCUSSION

Tests	Active	Sham	Cohens d
Wong Baker (WB)	M=1.49 SD= 1.04	M=1.77 SD=1.78	d=-0.20 (small)
Sensation	M=0.18 SD = 0.10	M=0.10 SD = 0.68	d=0.88 (large)

- No significant difference in WB, p = .756
- No significant difference between groups across sensations (all p > .05)
- Mild symptoms with no serious adverse events.
- Tingling and pricking = more common in both groups
- Sensation -anode electrode
- Sensation at the beginning
- Sample size:44 (22 per Group)

CONCLUSION

- tDCS-Safe and well-tolerable
- To plan larger RCT

REFERENCES