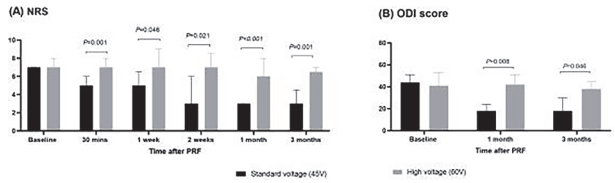
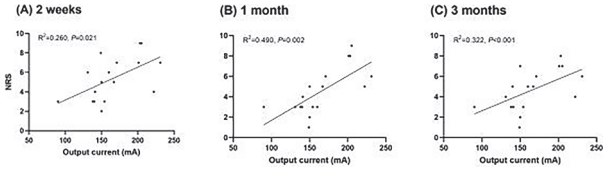
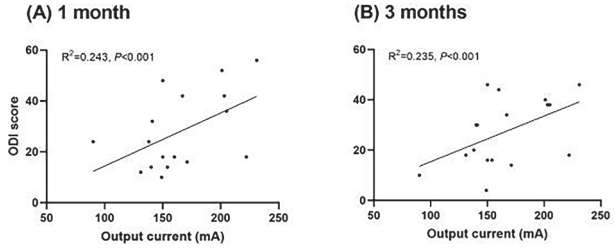
value of the output current was 163.5 mA with sensitivity of 87.5%, specificity of 100%, and an area under the receiver operating characteristic curve value of 0.92 (95% CI: 0.76–1.00).



Abstract EP119 Figure 1 Changes in NRS (A) and ODI score (B) during 3 months between the groups. NRS, numeric rating score; ODI,: Oswestry disability index; PRF, pPulsed radiofrequency



Abstract EP119 Figure 2 NRS according to the output current. NRS, numeric rating score



Abstract EP119 Figure 3 ODI score according to the output current. ODI: Oswestry disability index

Conclusions We found that lower output currents during PRF to lumbar DRG associated with higher analgesic effects.

EP120 TRANSCRANIAL DIRECT CURRENT STIMULATION FOR CHRONIC PAIN MANAGEMENT IN KNEE OSTEOARTHRITIS: A SYSTEMATIC REVIEW AND META-ANALYSIS OF RANDOMIZED CONTROLLED TRIALS

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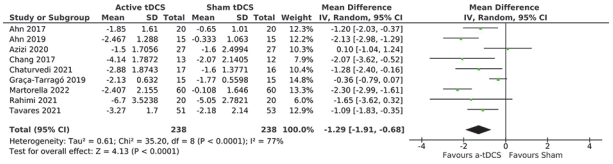
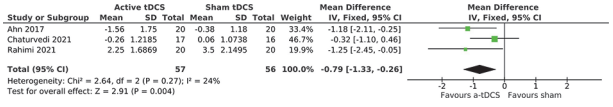
Background and Aims Knee osteoarthritis (KOA) is a prevalent degenerative disease characterized by pain and functional impairment. While traditional pain management provides limited relief, Transcranial Direct Current Stimulation (tDCS) has emerged as a potential modality for non-invasive pain modulation. We conducted a systematic review and meta-analysis evaluating the efficacy of active versus sham tDCS in these patients.

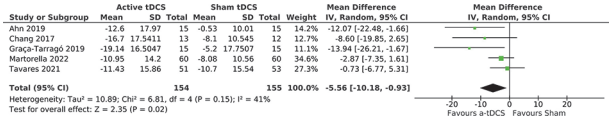
Methods PubMed, EMBASE and Cochrane were searched for randomized controlled trials (RCTs) comparing active M1-SO tDCS to sham tDCS in patients diagnosed with KOA experiencing chronic pain. We assessed WOMAC (Western Ontario and McMaster Universities Osteoarthritis) index and pain score changes in different time points following treatment sessions. RevMan 5.4 and the RoB-2 tool were used for statistical analyses and risk of bias evaluation, respectively.



Abstract EP120 Figure 1 Pain scores reduction from baseline to the end of treatment significantly favoured the a-tDCS group



Abstract EP120 Figure 2 The reduction in pain scores from three to five weeks showed favourable results for the a-tDCS intervention



Abstract EP120 Figure 3 The a-tDCS group showed more significant reduction in WOMAC index following treatment when compared to sham tDCS

Results We pooled 9RCTs including 476 patients, 50% undergoing active tDCS. The initial assessment, comparing treatment-end pain scores with baseline scores revealed a significantly favorable effect for tDCS (figure 1). Two additional measurements were conducted after the conclusion of the treatment. The first, performed after 3-5 weeks, revealed significantly reduced scores in the active tDCS group (figure 2). The second, conducted after 2-3 months, indicated no statistically significant differences (Mean Difference -0.65; 95%CI -1.35 to 0.05; p<0.07; I2=49%; 3RCTs; 278 patients). Regarding the WOMAC scores, active tDCS also exhibited a significant decrease in comparison to the control group (figure 3).

Conclusions Our findings suggest that active tDCS holds promise as an adjunctive therapy to standard pain management of chronic pain in knee OA as it may decrease pain and increase function.