

FC01-02 - TANSKRANIAL DIRECT CURRENT STIMULATION IN DEPRESSION: A COMPARISON BETWEEN THERAPEUTIC EFFECTS OBTAINED IN HOSPITALIZED VS NON-HOSPITALIZED PATIENTS

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Introduction: Transcranial direct current stimulation (tDCS) is a novel somatic treatment proposed for depressive illness.

Aims: We aimed to assess the efficacy of tDCS in patients with severe depression and whether hospitalized patients respond differently from non-hospitalized subjects.

Methods: 28 patients (aged 36-79 year) with drug-resistant Major Depressive Episode in major Depressive Disorder or in Bipolar Disorder, according to DSM IV-TR, were enrolled. Patients were divided into two groups: 'outpatients' (N=14) and 'hospitalized patients' (N=14). HAM-D (21 items) were administered as outcome measure, before and after tDCS, to assess treatment response. tDCS delivered by a Newronika stimulator (Milano, Italy) was delivered over the dorsolateral prefrontal cortex (anodal electrode was placed on the left DLPC and cathode electrode on the contralateral area) at the intensity of 2mA, for twenty minutes, twice a day for 5 consecutive days.

Results: All the patients well tolerated the treatment with no side effects. Despite the different severity at the baseline between the two groups ($p=0.03$), after five days of tDCS the mood scores improved in both groups, by 22% in outpatients group ([baseline vs post stimulation: mean \pm SE] HDRS: 20.3 \pm 1.3 vs 15.9 \pm 1.8, $p= 0.009$) and by 32% in hospitalized patients (HDRS: 28.7 \pm 2.7 vs 19.7 \pm 2.8, $p= 0.0006$). The improvement after tDCS did not differ between the two groups ($p=0,3$).

Conclusions: tDCS significantly improves patients with severe major depression after five days of treatment without significantly different effects in hospitalized and non hospitalized patients. Hence, tDCS treatment could be suitable also for non hospitalized patients at low suicidal risk.