

TRANSCUTANEOUS SUPRAORBITALIS ELECTROTHERAPY WITH CEFALY IN THE PREVENTION OF MIGRAINE CRISIS: A PILOT STUDY OF SHORT TERM EFFICACY.

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Background. Cefaly is a medical device having a program delivering low frequency currents (up to 10 mA; 6 Hz; 300 μ s) over the front head. It triggers action potentials on the supratrochlearis and supraorbitalis nerves. It's claimed to be effective in headaches including migraine prevention (<http://www.cefaly.com>). It is thought to act by endorphinic and shift threshold mechanism.

Objectives. To assess efficacy of Cefaly to prevent migraine crisis in 6 patients suffering of frequent migraine crisis (between 2 and 8 crisis a week).

Methods. 6 patients having frequent migraines applied Cefaly with program 2 (endorphinic program) for 20 minutes everyday during 4 months. Treatment, headache frequency and intensity were monitored with diaries.

Results. After 120 days, Cefaly decreased frequency and intensity of migraine crisis in 5 patients. Three patients mentioned a complete remission of the crisis. Two patients had a reduction of the frequency and intensity of the crisis. One patient diary mentioned no change in frequency or intensity. Three patients stop completely the use of anti-migraines drugs and two diminish by 50% the use of drugs.

Conclusions. This study suggests that Cefaly is very effective to prevent migraine crisis and that a larger controlled study may be worthwhile. The exact mechanism of action should be investigate in order to improve the electrical parameters of the device and the protocol of use.