

# Global Postural Reeducation and migraine: a pilot-study

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**Introduction:** “Global Postural Reeducation” (GPR) is a method of physical therapy, designed by Professor Souchart, for the treatment of osteo-neuro-muscular pathologies. In our study this method was applied to patients with migraine without aura.

**Objective:** The correction of oculo-motor, crania-cervical and temporo-mandibular joint dysfunctions within “postural globality” can lead to the elimination of muscle tension that is one of the most important triggers of migraine and at same time a complication of this type of headache. The study aimed at evaluating whether this method could be useful in reducing the number, intensity and duration of migraine attacks and also the use of painkillers.

**Methods:** We recruited a sample of 16 female patients affected by migraine without aura, aged between 25 and 65 years. Following a randomized criterion, 8 patients were included into “experimental group” and the other 8 patients into the “control group”. Both groups were evaluated before starting treatment (T0), after 3 (T1) and 7 weeks (T2). Quality and quantity of migraine pain were evaluated by BS-11, PPI and SF-MPQ, while disability was assessed by BRS-6 and HIT-6. Experimental group patients received a “Postural and Morphological Assessment” plus a particular evaluation of Oculo-Motor System, upper cervical district (C0-C2) and temporo-mandibular joint. This group underwent both adequate pharmacological treatment and 10 GPR sessions. control group received pharmacological treatment only. Each patient filled out a migraine diary: particular attention was paid to the number of painkillers taken by migraineurs.

**Results:** *Friedman test* for non parametric data showed an improvement of all rating scales values in the experimental group. In particular, at T1 there was a decrease of all the considered parameters (quality and quantity of pain, duration, frequency and disability) compared to T0 ( $p < 0,05$ ). Improvement trend resulted also at T2, except for two cases ( $p < 0,05$ ). In the control group, after an initial partial improvement at T1 compared to T0, most of values remained unchanged or worsened; few patients improved at T2 compared to T1.

**Conclusions:** Experimental Group patients improved quality and quantity of pain, attacks duration and frequency and disability. Furthermore, 80% of patients in the experimental group replaced the anti-migraine medication, i.e. triptans, with NSAIDS, while the other 20% reduced the number of taken painkillers. Our study shows the efficacy of GPR treatment on patients with migraine without aura.