

IMPACT OF PROPHYLACTIC TREATMENT ON COGNITIVE FUNCTION IN MIGRAINE: A CLINICAL EVALUATION USING THE I-MIG-SCOG SCALE

P. Solla, E. Ogana, F. Gamberoni, S. Terzitta, T. Ercoli

Headache Center, SC Neurolocìgical Clinic, AOU Sassari, Italy

Background. Migraine is frequently accompanied by cognitive issues that significantly reduce patients' quality of life. In this regard, we aimed to evaluate the subjective cognitive burden related to migraine in a real-world cohort of patients attending a specialized headache center under advanced prophylaxis, and to analyze the correlation between the I-MIG-SCOG scale score and the residual monthly attack frequency.

Methods. A cross-sectional analysis was conducted based on data recorded during outpatient follow-up visits in migraine patients undergoing prophylactic treatment with subcutaneous monoclonal antibodies or gepants. All migraine patients who had a fully completed 9-item I-MIG-SCOG scale at their last visit were included. The severity of the subjective cognitive impairment was quantified using the scale's total score (range 0–18) and correlated with the monthly headache frequency recorded at that visit.

Results. The preliminary analysis included 62 patients. The data confirmed a clear positive linear correlation between a high residual attack frequency and a more severe cognitive burden. Patients with a higher frequency of attacks per month showed significantly greater cognitive dysfunction on the I-MIG-SCOG scale (characterized by severe concentration deficits, slowed problem-solving, and anomia), with peak scores ranging between 10 and 15 points. Conversely, patients who achieved optimal clinical control thanks to prophylaxis, with minimal residual frequency (0 to 2 attacks/month), recorded minimal or zero I-MIG-SCOG scores, ranging between 0 and 3 points.

Conclusions. The preliminary results of this study consolidate the evidence that the transient attentive and executive difficulties associated with migraine are strictly dependent on the clinical control of attack frequency. An effective prophylactic therapy not only reduces physical pain but is also associated with a drastic reduction in subjective cognitive deficit, substantially improving the patient's global functional status.