

INTEGRATED MULTIDISCIPLINARY APPROACH IN MIGRAINE MANAGEMENT: A CASE REPORT

S. Galimberti[1], G. Querzola[2]

[1]Osteopath, BSc in Exercise Science, Private Practice, Milan, Italy; [2]Neurology Department, Headache Center, Stroke Unit, San Carlo Borromeo Hospital (ASST Santi Paolo e Carlo), Milan, Italy

Background. Migraine is a multifactorial neurological disorder in which congenital predisposition and environmental factors contribute to neurological dysfunction and potentially disabling headache attacks. Alongside pharmacological therapies, there is growing interest in multidisciplinary approaches aimed at managing modifiable factors associated with migraine. Chronic stress, persistent cognitive patterns, difficulties in emotional regulation, and dysfunctional lifestyle habits may contribute to the persistence of this condition by increasing susceptibility to stimuli involved in triggering and maintaining migraine attacks.

Methods. We report the case of a 43-year-old woman with a neurologist-confirmed diagnosis of migraine without aura and a 10-year history of the disease. At baseline, the patient reported daily background headache with migrainous features and moderate intensity, associated with 6–7 severe migraine attacks per month (Monthly Migraine Days [MMD] = 7), frequently leading to significant limitations in daily activities (MIDAS score: 48) and prolonged bed rest. Pain intensity was rated as 10/10 on the Visual Analogue Scale (VAS), while the monthly pain medication intake (MPI) was 27. The patient underwent a 5-month integrated multidisciplinary program including osteopathic treatment, nutritional assessment, individualized physical activity, neurocognitive education focused on emotional and behavioral factors, mindfulness, autogenic training, guided imagery, and home-based exercises. Preventive pharmacological therapy remained unchanged during the first three months and was subsequently reduced under neurological supervision.

Results. After the 5-month intervention, the patient showed complete resolution of the daily background headache and a marked reduction in severe migraine attacks. Pain intensity decreased from a VAS score of 10/10 to a mean VAS score of 4/10, while monthly pain medication intake decreased from 27 to 4. The patient also resumed physical activity, travelling, and social activities, with a substantial improvement in disability (MIDAS score: 5). Clinical benefits were maintained at the 6-month follow-up after completion of the multidisciplinary program.

Conclusions. This case suggests that an integrated multidisciplinary approach may represent a valuable supportive strategy in migraine management, being associated with reduced attack frequency and pain intensity, lower use of acute medications, decreased migraine-related disability, and improved quality of life.