

## 46. POST-TRAUMATIC STRESS DISORDER: A POSSIBLE FACTOR OF MIGRAINE CHRONIFICATION

**Author:** Patrinihi Dumitrița

**Scientific adviser:** Ion Moldovanu, PhD, Professor, Department of Neurology No. 1, *Nicolae Testemitanu* State University of Medicine and Pharmacy of the Republic of Moldova.

**Introduction.** Migraine is a worldwide severe and disabling condition, associated with significant personal and social stress. Over the last decades, important evidence has emerged regarding the major role of post-traumatic stress disorder (PTSD) in the chronicity of migraine.

**Aim of study.** The purpose of this research is to review the scientific literature and present the most relevant facts concerning the major role of PTSD, regarding natural or social phenomena, in the process of migraine chronification.

**Methods and materials.** Using the Scholar Google search engine, PubMed, NCBI and Medscape, the most relevant studies were selected for a systematic review of publications on this topic from the last 5 years. The search provided 4550 articles, of which 55 proved to be potentially eligible, 39 reviews and 16 meta-analyses.

**Results.** Actual research reported that PTSD is a psychiatric disorder that can occur among people who have experienced or witnessed a major traumatic event, falling into 2 categories: a) PTSD related to natural and social phenomena: floods, war, acts of terrorism, serious accidents, etc.; and b) PTSD related to interpersonal relationships: moral harassment or sexual violence. A large proportion of migraineurs have PTSD, with a higher prevalence among people with chronic migraine (CM) compared to those with episodic migraine. Besides the risk of death, trauma and disruption of daily life, PTSD caused by a natural disaster can have long-term effects, with a cumulative risk of suffering that can be felt even 20 years later. Traumatic experiences enhance the risk of chronic pain by altering common brain circuits, amygdala, hippocampus, medial prefrontal cortex - key regions associated with stress responses and chronic pain. According to current literature, refugees are at a major risk of developing PTSD, and the prevalence of persistent migraine among them is high. In addition, a previous experience of torture, especially psychological torture, is associated with an increased risk of prolonged pain. Furthermore, considering the high rate of concussion and probability of brain injury among the military population, PTSD is a disabling trauma among war veterans, and they are more likely to exhibit aggression, substance abuse, unemployment, etc. all of which contribute to the migraine chronification.

**Conclusion.** Comorbidity between PTSD and CM has a negative impact on developing both disorders, with significant quality of life and psychosocial impact. The mechanisms underlying these relationships are diverse and multifactorial.