▪ Headache Medicine 2026, Supplement ▪ p-ISSN 2178-7468, e-ISSN 2763-6178

Headache Medicine

ID: 288

High prevalence of pain catastrophizing and sleep disturbances in patients with trigeminal neuralgia: clinical implications

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Introduction
Trigeminal neuralgia (TN) is a complex and debilitating neuropathic condition characterized by paroxysmal episodes of intense, unilateral facial pain, resulting from specific neurophysiological alterations of the trigeminal pathway. Beyond the physical impact, evidence points to a high prevalence of psychological comorbidities, including anxiety and depressive symptoms, pain catastrophizing, and sleep disturbances, factors that can potentiate pain perception and exacerbate global suffering. Despite its clinical relevance, the condition remains frequently underdiagnosed or misdiagnosed as other dental and otolaryngological conditions, favoring inadequate interventions and delaying specialized treatment.

Objective
To investigate the correlation between pain intensity, catastrophizing levels, anxiety, depressive symptoms, and sleep quality in patients with TN.

Methods: Systematic review study based on cross-sectional and observational epidemiological data. The search was performed in PubMed and SciELO databases (2013-2025) using the descriptors "trigeminal neuralgia", "facial pain", and "comorbidities". Following the inclusion criteria, five relevant studies were selected for multidimensional analysis based on validated scales: Visual Analog Scale (VAS), Pain Catastrophizing Scale (PCS), Hospital Anxiety and Depression Scale (HADS), and Pittsburgh Sleep Quality Index (PSQI).

Results
The synthesis of the studies revealed, in a reference sample of 38 patients (68.4% women; mean age 64.4 years), a predominance of right-sided involvement (57%) and the V2+V3 branches (52.6%). In the PCS assessment, 73.7% showed high catastrophizing (> 20), with a median score of 32.5. Regarding the PSQI, 86.8% exhibited poor sleep quality (≥ 6), with rumination being the central predictor of unsatisfactory sleep ($p<0.05$). Using the HADS scale, anxiety was identified in 28.9% (HADS-A ≥ 9) and depression in 34.2% (HADS-D ≥ 9) of the sample. Pain intensity, measured by VAS, was classified as moderate/severe (≥ 4) by 50% of the patients and showed a significant correlation with catastrophizing ($p=0.03$), anxiety ($p=0.04$), and depression ($p=0.01$). Underdiagnosis led 30% to 60% of individuals to undergo iatrogenic dental procedures before clinical confirmation. Additionally, data from an educational intervention showed that 75% of the monitored patients (n=8) achieved symptom control and a drastic reduction in the frequency of hospital visits.

Conclusion
There is a strong correlation between pain scores (VAS), catastrophizing (PCS), and psychiatric disorders (HADS) in patients with TN, which reinforces the need for cognitive-behavioral interventions and educational programs to optimize coping and reduce the helplessness associated with recurrent crises.

Keywords:
Facial pain
Trigeminal neuralgia
Comorbidities

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