



Primary stabbing headache in patients with chronic or episodic migraine: Prevalences, correlations, and characteristics

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Introduction

Headache is one of the five most common disorders affecting humans, impacting quality of life, personal costs, and the healthcare system. Primary Stabbing Headache (PSH) is characterized by a lancinating pain lasting fractions of a second that occurs spontaneously in the absence of organic disease of the underlying structures or cranial nerves and is one of the least studied headaches to date.

Objective

This study evaluated the prevalence and clinical characteristics of PSH, correlating it with differences between chronic migraine (CM) and episodic migraine (EM).

Methods

This was a descriptive observational cross-sectional case-control study conducted between September 2023 - June 2024. Patients from the UFPR headache clinic with CM/EM and healthy controls (HC) were included. Data were collected through anamneses guided by specific questionnaires containing: semiological aspects of migraine, characteristics of PSH, allodynia, depression (PHQ-9) and anxiety (GAD-7).

Results

Patients with EM (n=49), CM (n=89), and HC (n=48) were evaluated. PSH was present in 31% of EM cases and 49% of CM cases ($p=0.036$); no patients in the HC group presented PSH. Pain intensity in the CM group was 8.3 points on the VAS, and 6.5 points in the EM group ($p<0.001$). The duration of the stabbing pain ranged from fractions of a second to seconds in 73% of cases, with subsequent discomfort lasting a few minutes. The frontal location of the stab was the most prevalent and equally common in both migraine groups (71.4%). Patients with PSH in the CM group compared to the EM group revealed more prevalent premonitory symptoms such as emotional stress (97.6%) and fatigue (50%) with $p=0.006/0.044$, respectively. These patients had a higher proportion of visual difficulties and other aura symptoms, including tingling, loss of strength, balance/coordination difficulties and weaker arm - all with $p<0.05$. Depression and anxiety questionnaire scores showed higher average scores in CM patients with PSH.

Conclusion

PSH is more prevalent and intense in CM patients, possessing some specific features that suggest shared neurobiological mechanisms. Despite the contributions, limitations include cross-sectional design and self-reporting.