



Characterization of headache in individuals with hemifacial spasm

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Background

Hemifacial spasm (HFS) is defined by involuntary facial contractions. There is little research about headache in HFS patients, although it is commonly observed in practice.

Objective

To characterize headache in HFS patients and its associations.

Methods

Cross-sectional study of 59 HFS patients. Patients with cognitive impairment, use of botulinum toxin in last three months or headache prophylactic drugs and other movement disorders were excluded. Following instruments were used: questionnaire of headache (intensity in visual analog scale: VAS, frequency and location), hemifacial spasm grading questionnaire (HFS-Score) for clinical severity and quality of life; hospital anxiety and depression scale (HADS), headache impact test (HIT-6) and insomnia severity index (ISI).

Results

Among 59 patients, 39 (66.1%) were female, mean age was 65.9 years (SD: 12.9). Average diagnosis time was 15.5 years (SD: 8.5) and most common side was left: 36 (61%). 31 patients (52.5%) mentioned headache and its time of onset was 18.1 years (IQR: 12.9). 14 (45.1%) patients mentioned that headache started or worsened after spasm onset. Headache intensity was 6 (IQR: 3.4), frequency 2.8 (IQR: 3.4) days/month and HIT-6 score was 52 (IQR: 24). Most frequent headache locations were: frontal: 14 patients (45.1%), parietal: 11 (35.4%), holocranial: 4 (12.9) and temporal: 2 (6.4%). Headache was bilateral in 19 patients (61.2%), alternating between right and left in 5 (16.1%), left-sided in 4 (12.9%) and right-sided in 3 (9.6%). Headaches types were: migraine without aura: 11 patients (35.4%), migraine with aura: 9 (29%), episodic tension-type: 8 (25.8%), chronic tension-type and chronic migraine in 1 case (3.2%) each. Patients with insomnia had higher frequency of headache ($p: 0.045$, Mann-Whitney test). No association was found between headache and spasm laterality, or between headache severity (intensity, HIT-6 or frequency) and spasm severity. No relations between headache and anxiety/depression were identified.

Conclusion

This study showed a considerable frequency of headache in HFS. No association between the laterality of headaches and the laterality of hemifacial spasm was observed. Although a large number of patients reported a worsening of their headaches after hemifacial spasm, there was no association between headache severity and the severity of hemifacial spasm.