

HEADACHE AS AN AURA OF EPILEPSY; VIDEO-EEG MONITORING STUDY

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Background: Headache can be associated with epilepsy as pre-ictal, ictal, or post-ictal phenomenon, but there are only limited studies on the patients with headache as an epileptic aura. We performed the present study to investigate the incidence and characteristics of headache as an epileptic aura, with the confirmation of EEG change by video-EEG monitoring.

Methods: Data of aura and clinical seizure episodes of 831 consecutive patients who undertook video-EEG monitoring were analyzed retrospectively. All auras described by the patients were classified into 54 categories, and the detailed features of headache were obtained in patients with headache as an aura. Video-recorded clinical seizures, EEG findings and neuroimaging data were used to determine the ictal onset areas of the patients.

Results: Six out of 831 (0.7%) patients experienced headache as aura (2 men, 4 women; age range: 25-52 years), and all six patients had partial seizures. Five patients described headache as the most frequent aura, and headache was the second aura in one patient. The characteristics of headache were hemicrania epileptica in two patients, tension-type headache in another two patients, and migraine-like headache in the other two patients. No patient met the diagnostic criteria of ictal epileptic headache or migraine aura-triggered seizure.

Conclusion: Our study shows that headache as an aura is uncommon in adult epilepsy patients, and the headache can present as diverse features including hemicrania epileptica, tension-type headache, and migraine-like headache. Further study is necessary to characterize the feature of headache as an epileptic aura in adult epilepsy patients.