



Persistent headache attributed to previous ischemic stroke: a prospective cohort study

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Introduction

Headache is a frequent sign of stroke, occurring both in the acute phase and persisting for 3 months after the stroke. The most recent International Classification of Headache Disorders has included persistent headache attributed to past stroke. Diagnosis depends on the presence of headache in the acute phase of stroke, although the headache persists for more than 3 months after the cerebrovascular event.

Objectives

To assess the incidence, course and impact of persistent headache attributed to a past ischemic stroke. To identify risk factors for the development of persistent headache attributed to a past stroke.

Methods

This was a prospective, observational cohort study. Inpatients with stroke, admitted within 72 hours of the onset of symptoms, were assessed at the Real Hospital Português de Beneficência de Pernambuco. Diagnosis of ischemic stroke occurred through the presence of an area of restricted diffusion in the magnetic resonance examination within a compatible clinical context. A semi-structured questionnaire was applied to characterize the sociodemographic information, the cerebrovascular disease and the headaches according to the diagnostic criteria of the International Classification of Headache Disorders. The NIHSS Stroke Scale and the HIT-6 scale were also used. Patients were assessed in person by the researchers in the acute phase of stroke and by telephone after 1 year to assess persistent headache attributed to past stroke.

Results

Initially, 221 patients were included, most of them male (59.3%) and whose mean age was 68.2 ± 13.8 years. One hundred and nineteen patients (53.9%) answered the questionnaire by telephone 1 year after the stroke. Persistent headache attributed to a past stroke presented a frequency of 10.1% in the sample (95%CI: 5.3 to 17.0%) 1 year after the stroke. Headache presented a median frequency of 2.5 (1 – 4) days of pain per month. The most frequent clinical features were a headache of moderate intensity and frontal location. The presence of photophobia and phonophobia occurred in half of the patients and the presence of nausea occurred in 66%. Most patients (58.3%) were classified as having a migraine-like pattern. One third of the patients were highly impacted, with the median of the HIT-6 questionnaire being 47.5 (37 – 61). We observed no risk factors for the development of persistent headache attributed to past stroke.

Conclusion

Persistent headache attributed to past stroke is a frequent complication after stroke, has a significant impact on the lives of one third of patients who suffer from it and has a migraine-like pattern as the most frequent phenotype.

Keywords: Ischemic stroke, Cerebral infarction, Migraine, Secondary headache, Vascular headaches.