Migraines with aura in midlife associated with increased prevalence of brain lesions in older age

23 June 2009

Middle-aged women who had migraine headaches with aura (sensory disturbances, such as with vision, balance or speech) had a higher prevalence of brain lesions when they were older, compared to individuals without similar types of headaches, according to a study in the June 24 issue of *JAMA*.

Migraine is a common neurovascular disorder that affects approximately 11 percent of adults and is more common in women than men. Approximately one-third of individuals with migraine experience neurological aura symptoms before headache onset (migraine with aura). Migraine is considered to be an episodic condition with no long-term consequences. However, recent studies suggest that migraine attacks may be associated with brain lesions identified on magnetic resonance imaging (MRI), particularly in the cerebellum, according to background information in the article.

Ann I. Scher, Ph.D., of Uniformed Services University, Bethesda, Md., and colleagues examined the relationship of midlife migraine symptoms and late-life infarct (tissue death)-like lesions evident on MRI. The study included 4,689 men and women in Reykjavik, Iceland (born between 1907-1935; 57 percent women) who were followed-up since 1967, examined, and interviewed about migraine symptoms in midlife (average age, 51 years; range, 33-65 years).

Between 2002 and 2006, more than 26 years later, brain MRIs were performed. Participants reporting headaches once or more per month were asked about migraine symptoms and were classified as having migraine without aura, migraine with aura, or nonmigraine headache. A comprehensive cardiovascular risk assessment was performed at examinations. Infarct-like lesions were present on MRI in 39.3 percent of men and 24.6 percent of women.

After adjusting for age, sex, and follow-up time, participants with midlife migraine with aura were at increased risk for total infarct-like lesions. Lesions in the cerebellum, but not in other locations of the brain, were more prevalent in women with migraine with aura compared with women without headache (23 percent vs. 15 percent); there was no difference in prevalence for men (19 percent vs. 21 percent).

The relationship between migraine with aura and cerebellar infarcts was only significant in women, but was not statistically different by the age at which headache symptoms were assessed. Migraine without aura and nonmigraine headache were not associated with an increased risk of lesions. The clinical significance of the infarct-like lesions, such as whether the individuals with them had any symptoms, was not assessed.

"In summary, this study suggests that a remote history of migraine with aura is associated with brain lesions commonly found in older populations. Results persisted after controlling for cardiovascular risk factors and history of cardiovascular disease, thus suggesting that the mechanism linking the migraine aura with these lesions is independent of the usual risk factors for ischemic vascular disease and may be specifically related to migraine with aura. Additional longitudinal studies with repeated MRIs are needed to better establish the temporality and dose-response relationship between migraine with aura and brain infarcts. Finally, the clinical implications of the infarct-like lesions identified have not been established and will require investigation," the authors write.

More information: *JAMA*. 2009;301[24]:2563-2570.

Source: JAMA and Archives Journals (news : web)

APA citation: Migraines with aura in midlife associated with increased prevalence of brain lesions in older age (2009, June 23) retrieved 18 September 2022 from https://medicalxpress.com/news/2009-06-migraines-aura-midlife-prevalence-brain.html

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.