MIGRAINE

Migraine — a risk factor for cardiovascular disease?

Migraine is associated with an increased risk of various cardiovascular events, including ischaemic and haemorrhagic stroke, according to a large, register-based cohort study from Denmark. The results, which were recently published in *The BMJ*, could have important implications for the prevention of cardiovascular disease.

"Migraine is primarily a headache disorder, but previous studies have suggested a link between migraine and stroke and myocardial infarction, particularly among women," explains lead author Kasper Adelborg. "The relationship between migraine and other heart problems is less well known, and to improve our understanding, we conducted a nationwide cohort study of all patients with migraine in Denmark."

Using data from the Danish National Patient Registry and the National Health Service Prescription Database, Adelborg and colleagues identified 51,032 patients with migraine. These individuals were compared with 510,320 age-matched and sex-matched controls from the general population. The researchers calculated the incidence of cardiovascular events during the first year after migraine diagnosis and at various intervals during a total follow-up period of 19 years.

In addition to confirming the previously identified links with stroke and myocardial infarction, the team found that migraine was associated with an increased risk of venous thromboembolism and atrial fibrillation, but not of heart failure or peripheral artery disease. Ischaemic and haemorrhagic stroke were the most likely cardiovascular events in the migraine cohort (HR 2.26 and 1.94, respectively).

The risk of a cardiovascular event was elevated throughout the

19-year follow-up period, but was highest in the first year after migraine diagnosis. The reported associations held true across the entire cohort; however, women with migraine and patients who had migraine with aura seemed to be particularly susceptible to cardiovascular disease.

"Accumulating evidence indicates that migraine should be considered as a risk factor for most cardiovascular diseases in both men and women," comments Adelborg. "It will be important to determine whether prevention strategies in patients with migraine can reduce the burden of cardiovascular disease in patients with this common disorder."

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ORIGINAL ARTICLE Adelborg, K. et al. Migraine and risk of cardiovascular diseases: Danish population based matched cohort study. *BMJ* **360**, k96 (2018)

FURTHER READING Kurth, T. et al. Migraine and risk of cardiovascular disease in women: prospective cohort study. *BMJ* **353**, i2610 (2016)

FG Ischaemic and haemorrhagic

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