

A new marker for migraine?

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Credit: Sasha Wolff/Wikipedia

Researchers may have discovered a new marker found in the blood for episodic migraine, according to a study published in the September 9, 2015, online issue of *Neurology*, the medical journal of the American

Academy of Neurology. Episodic migraine is defined as having less than 15 headaches per month.

"While more research is needed to confirm these initial findings, the possibility of discovering a new biomarker for migraine is exciting," said study author B. Lee Peterlin, DO, with the Johns Hopkins University School of Medicine in Baltimore and a member of the American Academy of Neurology.

For the study, 52 women with episodic migraine and 36 women who did not have any headaches underwent a neurologic exam, had their [body mass index](#) measured and gave [blood samples](#). Women with migraine had an average of 5.6 [headache](#) days per month.

The blood samples were tested for a group of lipids that participate in energy homeostasis and that help to regulate inflammation in the brain.

The study found that the total levels of the lipids called ceramides were decreased in women with episodic migraine as compared to those women without any headache disorders. Women with migraine had approximately 6,000 nanograms per milliliter of total ceramides in their blood, compared to women without headache who had about 10,500 nanograms per milliliter. Every standard deviation increase in total ceramide levels was associated with over a 92-percent lower risk of having migraine.

Additionally, and in contrast to the ceramides, two other types of lipids, called sphingomyelin, were associated with a 2.5 times greater risk of migraine with every standard deviation increase in their levels.

The researchers also tested the [blood](#) of a random small sample of 14 of the participants for a panel of these lipids and were able to correctly identify those who had migraine or who were controls without headache

based on these [blood lipid levels](#).

"This study is a very important contribution to our understanding of the underpinnings of migraine and may have wide-ranging effects in diagnosing and treating migraine if the results are replicated in further studies," said Karl Ekblom, MD, PhD, with the Karolinska Institutet in Stockholm, Sweden, who wrote an accompanying comment article.

Ekblom noted there were limitations in the study. Only [women](#) were included, [chronic migraine](#) was not studied and an unusually high amount of participants had migraine with aura. He also noted that a comparison should be made in future studies with other types of headache, such as cluster headache.

Provided by American Academy of Neurology

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