

Comment:
**Altered sphingolipid metabolism—
A marker for episodic migraine?**

A biological marker for migraine would be of great value in clinical practice. This collaborative study evaluated interictal, circulating sphingolipids in 52 female patients with episodic migraine compared with 36 women who did not have headaches. Total ceramide and its precursor, dihydroceramide, were decreased in the migraineurs as compared with controls, and, furthermore, some very long sphingomyelin species were increased in those with migraine. The authors suggest that serum sphingolipid panels have the potential to differentiate patients with episodic migraine from controls.

The study¹ was properly performed, based on compelling and clear thoughts on the pathophysiologic basis of the disease. There are some limitations. Only female patients with migraine were included. Chronic migraine was not studied. Also, there was an unusually high frequency of patients who reported having symptoms of aura. Medical therapy is only briefly mentioned. The use of contraceptive pills in this female study population and the eventual confounding role of any antimigraine prophylactic medication might have been of some interest when discussing the import of the results.

It should be stressed that a diagnosis of migraine is still a clinical one, based on a careful history of the patient and utilizing internationally recognized clinical criteria. In many persons, a clinical diagnosis may be difficult. Specific markers of the disease are therefore of particular interest. However, before claiming that an altered sphingolipid metabolism might provide a diagnostic tool for migraine, a comparison should be made with other types of headache, e.g., cluster headache.

To summarize, this study is an important contribution to our understanding of the pathophysiology of migraine and may have vast practical clinical and therapeutic implications if it is supported by further studies.

1. Peterlin BL, Mielke MM, Dickens AM, et al. Interictal, circulating sphingolipids in women with episodic migraine: a case-control study. *Neurology* 2015;85:xxx-xxx.

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