

The Clinical Review on the “Prevention of Migraine”: Acupuncture is Conspicuous by its Inexplicable Absence

We read your article on the prevention of migraines with great interest but couldn't tease out how the authors chose which treatments to include.¹ The review mentions pharmaceutical, nutraceutical and physical approaches, both FDA approved and off-label, effective and ineffective, but fails to mention acupuncture, which has stronger evidence than most of those recommended.

It would have been logical to consider only FDA-approved or guideline-endorsed interventions but most of those mentioned don't meet these criteria: most beta blockers, the antidepressants, ACE inhibitors, NSAIDs, statins, and supplements are not FDA-approved for migraine prevention and constitute off-label prescribing. By contrast, the FDA now recommends that doctors learn about acupuncture as a safe and effective pain treatment in order to reduce prescribing of opioids² and acupuncture is recommended in the NICE clinical guidelines for the prevention of migraine. The only drugs recommended are topiramate, propranolol and gabapentin³

The vast majority of treatments mentioned are poorly tolerated and frequently discontinued due to unpalatable side-effects. Many are not considered safe during pregnancy. Acupuncture is considered a very safe treatment.

Some of the included treatments have only the flimsiest of evidence supporting a recommendation, for example the combination of simvastatin plus vitamin D. On the other hand, the most recent Cochrane systematic review of acupuncture for migraine prophylaxis includes 4,985 participants in 25 randomised controlled trials, firmly placing it amongst the most well studied treatments.

Finally, one could have focused on effectiveness or efficacy, the logical choice for educating clinicians on how best to help their patients. But some treatments mentioned have zero evidence of efficacy, for example nortriptyline⁴. In stark contrast, strong peer-reviewed evidence supports the use of acupuncture as effective, efficacious and safe for migraine prophylaxis. In the most recent Cochrane review acupuncture is superior to no acupuncture (acute treatment only or routine care) and even to the diluted dose of acupuncture that masquerades as placebo⁵. Of most clinical interest, though, is that acupuncture was more effective than prophylactic drugs (metoprolol, flunarizine and others), and with fewer adverse events.

In summary, a review of treatments for migraine prophylaxis that fails to mention one of the best-studied, most effective and best tolerated does a great disservice to patients by misinforming clinicians. If there was a valid reason for this omission, we would be interested to hear it.

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References

1. Abramowicz M, Zuccotti G, Pflomm J-M, eds. Prevention of Migraine. *JAMA*. 2017;317(21):2230-2231. doi:10.1001/jama.2017.1680.
2. FDA. *FDA Education Blueprint for Health Care Providers Involved in the Management or Support of Patients with Pain*. 2017:1-10. <https://www.fda.gov/Drugs/NewsEvents/ucm553931.htm>.
3. NICE National Institute for Health and Care Excellence. *CG150. Headaches in Over 12s: Diagnosis and Management*. NICE; 2012. <https://www.nice.org.uk/guidance/cg150>.
4. Domingues RB, Silva ALPD, Domingues SA, Aquino CCH, Kuster GW. A double-blind randomized controlled trial of low doses of propranolol, nortriptyline, and the combination of propranolol and nortriptyline for the preventive treatment of migraine. *Arq Neuropsiquiatr*. 2009;67(4):973-977.
5. Linde K, Allais G, Brinkhaus B, et al. *Acupuncture for the Prevention of Episodic Migraine*. (Linde K, ed.). Chichester, UK: John Wiley & Sons, Ltd; 2016. doi:10.1002/14651858.CD001218.pub3.