Pharmaceuticals (Basel)

. 2024 Jan 23;17(2):145.

doi: 10.3390/ph17020145.

Effectiveness of Palmitoylethanolamide (Levagen+) Compared to a Placebo for Reducing Pain, Duration, and Medication Use during Migraines in Otherwise Healthy Participants-A Double-Blind Randomised Controlled Study

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- PMID: 38399360
- PMCID: PMC10892859
- DOI: 10.3390/ph17020145

Abstract

Migraines are a common neurological disorder that generally affects young to middle-aged adults and females more than males. Various treatment options are available; however, these can cause undesirable side effects. Therefore, alternative treatments with minimal side effects are still being investigated. Palmitoylethanolamide (PEA) is a signalling lipid known to have anti-inflammatory and analgesic properties. Previous prophylactic research has reported PEA supplementation to decrease pain associated with migraines. Upon commencement of migraine symptoms, participants were supplemented with either 600 mg of PEA (Levagen+) or a placebo (maltodextrin). Once a dose was taken, participants recorded a visual analogue scale (VAS) for pain every 30 min for 4 h or until the migraine resolved. If the migraine had not resolved 2 h post-dose, participants were instructed to take a second dose. Levagen+ supplementation resolved more headaches after 2- and 8 h, had a lower VAS for pain score at 1.5 and 4 h, and reduced rescue medication use significantly more than a placebo. No adverse events were reported in either group. Overall, PEA was safe and effective in reducing migraine pain, duration, and medication use in an otherwise healthy adult population.

Keywords: PEA; migraine; pain; rescue medication; resolution.

Conflict of interest statement

Author D. Briskey, R. Skinner, C. Smith, and A. Rao were employed by the company RDC Clinical. The authors declare that this study received funding from Gencor Pacific. The funder was not involved in the study design, collection, analysis, interpretation of data, the writing of this article, or the decision to submit it for publication.