

Template

 Entire dispensary

Review plan (10)

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Headaches

 Template by Fullscript

Updated Nov 18th, 2024

Preview Evidence

Evidence rating

The following protocols were developed using only **a,b,c**-quality evidence

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Overview

According to the World Health Organization, headaches are among the top ten most disabling conditions in the world. Globally, the number of adults who experience a general headache disorder is estimated to be as high as 46%. [\(20\)](#) Severe headaches are a common occurrence in US adults, with approximately 1 in every 6 Americans experiencing one within a 3 month period. This disproportionately affects women, with roughly 20.7% of women experiencing severe headaches compared to 9.7% of males. [\(5\)](#)

Due to the debilitating effects of severe headaches and/or migraines, it is essential to help address possible mechanisms or underlying causes. Primary headaches account for the majority of cases and are not typically associated with any life-threatening complications. [\(2\)](#)



The protocol below includes evidence-based ingredient suggestions to consider for either symptom relief or preventative management of primary headaches and/or migraines.

Feverfew (*Tanacetum parthenium*)

Feverfew (*Tanacetum parthenium*)

6.25-18.75 mg, three times per day, minimum 12 weeks (8)(15)

- Prophylactic supplementation was found to be effective in the prevention of migraines and generally safe, (9) however it is notable that long-term dosing may not be ideal in coronary disease patients due to possible cyclooxygenase-2 (COX-2) inhibition activity (17)
- A CO₂-extract (MIG-99, 6.25 mg three times daily) produced favorable outcomes as demonstrated by an increase in odds ratio for response rate of 3.4, and decreased migraine frequency by 1.9 per month (8)
- The highest effect for decreasing number of migraine attacks was found in the highest supplementation group was dose dependent when comparing MIG-99 extract supplementation in doses of 2.08 mg, 6.25 mg, and 18.75 mg to placebo (15)

Magnesium

Magnesium

600 mg, total per day of magnesium citrate, minimum 12 weeks (21)(13)

- Oral magnesium helps to decrease the frequency and intensity of migraine attacks when a dose of 600 mg is used for prophylactic purposes (21)
- Intravenous magnesium decreased acute migraines 15-45 minutes, 120 minutes and 24 hours after administration (6)
- Oral magnesium sulphate supplementation reduced migraine symptoms after 30 and 60 minutes (3)
- Magnesium is proposed to have vascular (affecting blood flow in frontal, temporal, and insular regions) and neurogenic (decreasing P1 amplitude) mechanisms in patients without aura (13)
- Magnesium sulfate has demonstrated better efficacy relieving migraine severity in acute migraines at 20 minutes, 1 hour and 2 hour intervals when compared to dexamethasone/metoclopramide administration (18)

Vitamin D

Vitamin D

2000 IU total per day, minimum 12 weeks (4)(11)

- Prophylactic supplementation of 100 µg (4000 IU) per day for 24 weeks decreased the frequency of migraines and number of days with a headache in patients aged 18 to 65 when compared to placebo (10)
- Calcitonin gene-related peptide (CGRP) decreased to 153.26 ng/L compared to 188.35 ng/L in placebo and correlated with an improvement in migraine disability assessment questionnaire (MIDAS) suggesting that vitamin D may have anti-nociceptive effects leading to migraine improvement (11)
- Patients with episodic migraines experienced 9 fewer days with migraine compared to 3 fewer days in placebo groups; additionally 29% of patients in the treatment group experienced at least a 50% reduction in number of migraines compared to 3% in placebo (4)

Butterbur

Butterbur (*Petasites hybridus*)

100-150 mg, total per day, minimum 12 weeks (12)(14)

- Frequency of migraine decreased by 60% compared to baseline when given CO2 extracted petasites hybridus for prophylactic treatment over a 12 week period (12)
- Petasites extract had a dose-dependent decrease in migraine attack frequency in groups as follows: 75 mg per day by 48%, 50 mg per day, and placebo by 26%; further analysis showed that a decrease in attack frequency more than or equal to 50% was also dose-dependent (14)
- Decrease in migraine attack frequency was observed in a dose-dependent manner when comparing 150 mg to 100 mg with more patients responding to treatment improvements more than 50% predominantly in the 150 mg group (1)

Coenzyme Q10

Coenzyme Q10

100-400 mg total per day, minimum of 12 weeks (7)(16)(19)

- Decreased frequency, severity, and duration of migraines correlated with a decrease in calcitonin gene-related peptide (CGRP) and TNF-a compared to placebo in non-menopausal women with episodic migraines (7)
- Reduced the number of migraine days per month and migraine duration when compared to placebo (22)

- When given in addition to current preventative pharmaceutical regime, 100 mg of CoQ10 daily decreased the number of monthly attacks by 1.6 and severity of headache by 2.3, compared to 0.5 and 0.6 in control group of normal preventative pharmaceutical regime ([19](#))
- Higher 50% responder rate for number of days with headache and/or nausea and attack frequency in treatment group (47.6%) vs. control (14.4%) ([16](#))

References

1. Agosti, R., Duke, R. K., Chrubasik, J. E., & Chrubasik, S. (2006). Effectiveness of Petasites hybridus preparations in the prophylaxis of migraine: a systematic review. *Phytomedicine: International Journal of Phytotherapy and Phytopharmacology*, 13(9-10), 743–746. <https://pubmed.ncbi.nlm.nih.gov/16987643/> (A)
2. Ahmed, F. (2012). Headache disorders: differentiating and managing the common subtypes. *British Journal of Pain*, 6(3), 124–132. <https://pubmed.ncbi.nlm.nih.gov/26516483/> (F)
3. Bigal, M. E., Bordini, C. A., & Speciali, J. G. (2002). [Efficacy of three drugs in the treatment of migrainous aura: a randomized placebo-controlled study]. *Arquivos de neuro-psiquiatria*, 60(2-B), 406–409. <https://pubmed.ncbi.nlm.nih.gov/12131941/> (C)
4. Buettner, C., Nir, R.-R., Bertisch, S. M., Bernstein, C., Schain, A., Mittleman, M. A., & Burstein, R. (2015). Simvastatin and vitamin D for migraine prevention: A randomized, controlled trial. *Annals of Neurology*, 78(6), 970–981. <https://pubmed.ncbi.nlm.nih.gov/26418341/> (B)
5. Burch, R., Rizzoli, P., & Loder, E. (2018). The Prevalence and Impact of Migraine and Severe Headache in the United States: Figures and Trends From Government Health Studies. *Headache*, 58(4), 496–505. <https://pubmed.ncbi.nlm.nih.gov/29527677/> (D)
6. Chiu, H.-Y., Yeh, T.-H., Huang, Y.-C., & Chen, P.-Y. (2016). Effects of Intravenous and Oral Magnesium on Reducing Migraine: A Meta-analysis of Randomized Controlled Trials. *Pain Physician*, 19(1), E97–E112. <https://pubmed.ncbi.nlm.nih.gov/26752497/> (C)
7. Dahri, M., Tarighat-Esfanjani, A., Asghari-Jafarabadi, M., & Hashemilar, M. (2019). Oral coenzyme Q10 supplementation in patients with migraine: Effects on clinical features and inflammatory markers. *Nutritional Neuroscience*, 22(9), 607–615. <https://pubmed.ncbi.nlm.nih.gov/29298622/> (B)
8. Diener, H. C., Pfaffenrath, V., Schnitker, J., Friede, M., & Henneicke-von Zepelin, H.-H. (2005). Efficacy and safety of 6.25 mg t.i.d. feverfew CO₂-extract (MIG-99) in migraine prevention—a randomized, double-blind, multicentre, placebo-controlled study.

Cephalalgia: An International Journal of Headache, 25(11), 1031–1041.

<https://pubmed.ncbi.nlm.nih.gov/16232154/> (A)

9. Ernst, E., & Pittler, M. H. (2000). The efficacy and safety of feverfew (*Tanacetum parthenium* L.): an update of a systematic review. *Public Health Nutrition*, 3(4A), 509–514. <https://pubmed.ncbi.nlm.nih.gov/11276299/> (C)
10. Gazerani, P., Fuglsang, R., Pedersen, J. G., Sørensen, J., Kjeldsen, J. L., Yassin, H., & Nedergaard, B. S. (2019). A randomized, double-blinded, placebo-controlled, parallel trial of vitamin D3 supplementation in adult patients with migraine. *Current Medical Research and Opinion*, 35(4), 715–723. <https://pubmed.ncbi.nlm.nih.gov/30182753/> (B)
11. Ghorbani, Z., Rafiee, P., Fotouhi, A., Haghighi, S., Rasekh Magham, R., Ahmadi, Z. S., Djalali, M., Zareei, M., Razeghi Jahromi, S., Shahemi, S., Mahmoudi, M., & Togha, M. (2020). The effects of vitamin D supplementation on interictal serum levels of calcitonin gene-related peptide (CGRP) in episodic migraine patients: post hoc analysis of a randomized double-blind placebo-controlled trial. *The Journal of Headache and Pain*, 21(1), 22. <https://pubmed.ncbi.nlm.nih.gov/32093657/> (B)
12. Grossman, W., & Schmidramsl, H. (2001). An extract of *Petasites hybridus* is effective in the prophylaxis of migraine. *Alternative Medicine Review: A Journal of Clinical Therapeutic*, 6(3), 303–310. <https://pubmed.ncbi.nlm.nih.gov/11410074/> (C)
13. Köseoglu, E., Talaslioglu, A., Gönül, A. S., & Kula, M. (2008). The effects of magnesium prophylaxis in migraine without aura. *Magnesium Research: Official Organ of the International Society for the Development of Research on Magnesium*, 21(2), 101–108. <https://pubmed.ncbi.nlm.nih.gov/18705538/> (C)
14. Lipton, R. B., Göbel, H., Einhüpl, K. M., Wilks, K., & Mauskop, A. (2004). *Petasites hybridus* root (butterbur) is an effective preventive treatment for migraine. *Neurology*, 63(12), 2240–2244. <https://pubmed.ncbi.nlm.nih.gov/15623680/> (B)
15. Pfaffenrath, V., Diener, H. C., Fischer, M., Friede, M., Henneicke-von Zepelin, H. H., & Investigators. (2002). The efficacy and safety of *Tanacetum parthenium* (feverfew) in migraine prophylaxis—a double-blind, multicentre, randomized placebo-controlled dose-response study. *Cephalalgia: An International Journal of Headache*, 22(7), 523–532. <https://pubmed.ncbi.nlm.nih.gov/12230594/> (C)
16. Sándor, P. S., Di Clemente, L., Coppola, G., Saenger, U., Fumal, A., Magis, D., Seidel, L., Agosti, R. M., & Schoenen, J. (2005). Efficacy of coenzyme Q10 in migraine prophylaxis: a randomized controlled trial. *Neurology*, 64(4), 713–715. <https://pubmed.ncbi.nlm.nih.gov/15728298/> (C)
17. Saranitzky, E., White, C. M., Baker, E. L., Baker, W. L., & Coleman, C. I. (2009). Feverfew for migraine prophylaxis: a systematic review. *Journal of Dietary Supplements*, 6(2), 91–103. <https://pubmed.ncbi.nlm.nih.gov/22435410/> (A)

18. Shahrami, A., Assarzadegan, F., Hatamabadi, H. R., Asgarzadeh, M., Sarehbandi, B., & Asgarzadeh, S. (2015). Comparison of therapeutic effects of magnesium sulfate vs. dexamethasone/metoclopramide on alleviating acute migraine headache. *The Journal of Emergency Medicine*, 48(1), 69–76. <https://pubmed.ncbi.nlm.nih.gov/25278139/> (C)
19. Shoeibi, A., Olfati, N., Soltani Sabi, M., Salehi, M., Mali, S., & Akbari Oryani, M. (2017). Effectiveness of coenzyme Q10 in prophylactic treatment of migraine headache: an open-label, add-on, controlled trial. *Acta Neurologica Belgica*, 117(1), 103–109. <https://pubmed.ncbi.nlm.nih.gov/27670440/> (C)
20. Stovner, L., Hagen, K., Jensen, R., Katsarava, Z., Lipton, R., Scher, A., Steiner, T., & Zwart, J.-A. (2007). The global burden of headache: a documentation of headache prevalence and disability worldwide. *Cephalalgia: An International Journal of Headache*, 27(3), 193–210. <https://pubmed.ncbi.nlm.nih.gov/17381554/> (D)
21. Von Luckner, A., & Riederer, F. (2018). Magnesium in Migraine Prophylaxis-Is There an Evidence-Based Rationale? A Systematic Review. *Headache*, 58(2), 199–209. <https://pubmed.ncbi.nlm.nih.gov/29131326/> (A)
22. Zeng, Z., Li, Y., Lu, S., Huang, W., & Di, W. (2019). Efficacy of CoQ10 as supplementation for migraine: A meta-analysis. *Acta Neurologica Scandinavica*, 139(3), 284–293. <https://pubmed.ncbi.nlm.nih.gov/30428123/> (A)


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