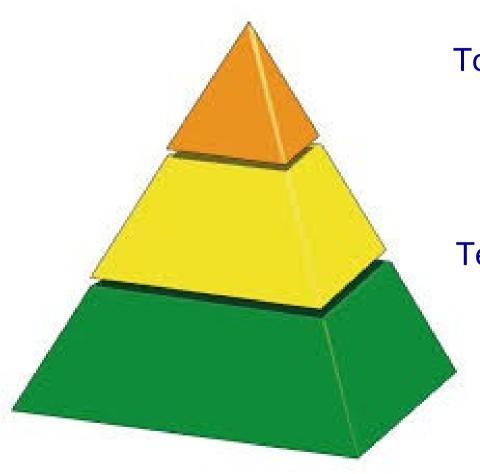
É possível viver bem com a dor e a enxaqueca?

Dra Karen dos Santos Ferreira

Neurologista- Hôpital du Suroit - Valleyfield, Quebec, Canada Migraine Québec, IASP e American Academy of Neurology Neurologista especialista em Tratamento da Dor, Mestre e PhD -Faculdade de Medicina de Ribeirão Preto -Universidade de São Paulo



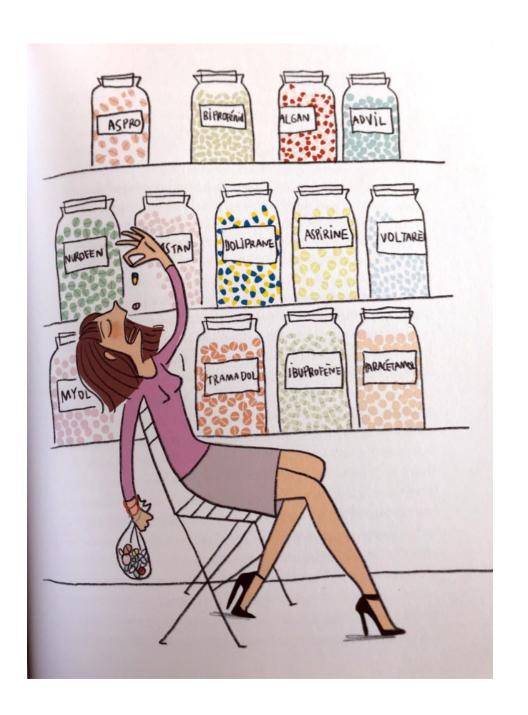




Topo: tecnologia: Bloqueios, Botox, Anticorpos monoclonais, Neuroestimulação

Medicamentos, Terapia física, Terapia psicológica

Base: exercício fisico, alimentação, sono, manejo estresse (mindfulness, yoga)



Viver sem Dor

Vagner Raso Julia Maria D'Andrea Greve Marcos Doederlein Polito

POLLOCK

Fisiologia Clínica do Exercício



















Exercise as migraine prophylaxis: A randomized study using relaxation and topiramate as controls

Cephalalgia 31(14) 1428–1438 (© International Headache Society 2011 Reprints and permissions: sagepub.co.ul/journalsPermissions.nav DOI: 10.1177/0333102411419681 cep.sagepub.com

(\$)SAGE

Emma Varkey¹, Åsa Cider^{1,2}, Jane Carlsson¹ and Mattias Linde^{1,3,4}

Abstract

Aim: Scientific evidence regarding exercise in migraine prophylaxis is required. Therefore this study aimed to evaluate the effects of exercise in migraine prevention.

Methods: In a randomized, controlled trial of adults with migraine, exercising for 40 minutes three times a week was compared to relaxation according to a recorded programme or daily topiramate use, which was slowly increased to the individual's highest tolerable dose (maximum 200 mg/day). The treatment period lasted for 3 months, and migraine status, quality of life, level of physical activity, and oxygen uptake were evaluated. The primary efficacy variable was the mean reduction of the frequency of migraine attacks during the final month of treatment compared with the baseline. Results: Ninety-one patients were randomized and included in the intention-to-treat analysis. The primary efficacy variable showed a mean reduction of 0.93 (95% confidence interval (CI) 0.31-1.54) attacks in the exercise group, 0.83 (95% CI 0.22-1.45) attacks in the relaxation group, and 0.97 (95% CI 0.36-1.58) attacks in the topiramate group. No significant difference was observed between the groups (p=0.95).

Conclusion: Exercise may be an option for the prophylactic treatment of migraine in patients who do not benefit from or do not want to take daily medication.



Amitriptyline and aerobic exercise or amitriptyline alone in the treatment of chronic migraine: a randomized comparative study

Amitriptilina e exercício aeróbico ou amitriptilina isolada no tratamento da migrânea crônica: um estudo randomizado e comparativo

Michelle Dias Santos Santiago, Deusvenir de Souza Carvalho, Alberto Alain Gabbai, Mariana Machado Pereira Pinto, Andrea Regina Correa Moutran, Thais Rodrigues Villa

ABSTRACT

To compare the preventive treatment benefits of amitriptyline and aerobic exercise or amitriptyline alone in patients with chronic migraine. **Method:** Sixty patients, both genders, aged between 18 and 50 years, with a diagnosis of chronic migraine, were randomized in groups called amitriptyline and aerobic exercise or amitriptyline alone. The following parameters were evaluated: headache frequency, intensity and duration of headache, days of the analgesic medication use, body mass index (BMI), *Beck Depression Inventory* (BDI) and *Beck Anxiety Inventory* (BAI) scores. **Results:** In the evaluated parameters, was observed decrease in headache frequency (p=0.001), moderate intensity (p=0.048), in headache duration (p=0.001), the body mass index (p=0.001), *Beck Depression Inventory* (p=0.001) and *Beck Anxiety Inventory* scores (p=0.001), when groups were compared in the end of third month. **Conclusion:** In this study, the amitriptyline was an effective treatment for chronic migraine, but its efficacy was increased when combined with aerobic exercise.

Keywords: chronic migraine, adults, prophylaxis, amitriptyline, aerobic exercise.

Table 2. Results of headache frequency (days/month), duration and intensity of headache attacks (attacks/month), use of analgesic medication (days/month), body mass index (BMI), Beck Depression Inventory (BDI) and Beck Anxiety Inventory (BAI) scores at baseline and the end of the 3rd month in amitriptyline alone (n=26) and amitriptyline and aerobic exercise group (n=24).

Variable	Evaluation	Group Amitr alone±SD	Group Amitr and exer±SD	p-value
Frequency	initial	25±6.31	23±6.11	
	3 rd month	13±6.41	5±2.21	0.001**
Duration (6h)	initial	1±3.14	4±9.74	
	3 rd month	4±2.94	3±1.79	0.017*
Duration (12h)	initial	13±7.50	3±12.1	
	3 rd month	1±4.62	6±1.74	0.001**
Duration (18h)	initial	5±9.13	2±3.26	
	3 rd month	3±2.53	1±1.02	0.733
Duration (24h)	initial	20±13.9	20±11.0	
	3 rd month	3±6.19	0	0.001**
Intensity 1 (mild)	initial	10±8.68	8±8.38	
	3 rd month	5±3.18	3±2.16	0.528
Intensity 2 (moderate)	initial	13±6.89	14±7.57	
	3 rd month	6±4.75	3±1.86	0.048*
Intensity 3 (disabling)	initial	6±5.50	6±6.55	
	3 rd month	2±2.65	0	0.093
Analgesic Medication	initial	20±9.63	16±8.95	
	3 rd month	3±2.99	1±1.48	0.752
BMI	initial	24±2.66	24±2.57	
	3 rd month	25±2.92	23±2.64	0.006**
BDI	initial	14±11.45	10±6.70	
	3 rd month	10±11.20	6±5.69	0.001**
BAI	initial	16±15.85	15±8.91	
	3 rd month	10±12.10	8±7.17	0.001**

^{*}p-value=0.05; **p-value=0.001.



Atividade física e Dor crônica- IASP Factsheet-

A atividade física reduz a intensidade e a incapacidade da dor, além de outros benefícios como força, flexibilidade, resistência, diminuição no risco cardiovascular, melhora da cognição, humor e dor crônica.

Recomendação da OMS:

Crianças e jovens de 5 a 17 anos: Pelo menos 60 minutos de atividade física de intensidade moderada a vigorosa diariamente.

Adultos de 18 a 64 anos:

Pelo menos 150 minutos de atividade física aeróbica de intensidade moderada ao longo da semana ou fazer pelo menos 75 minutos de atividade física aeróbica de intensidade vigorosa ao longo da semana ou uma combinação equivalente de exercícios de intensidade moderada e vigorosa.

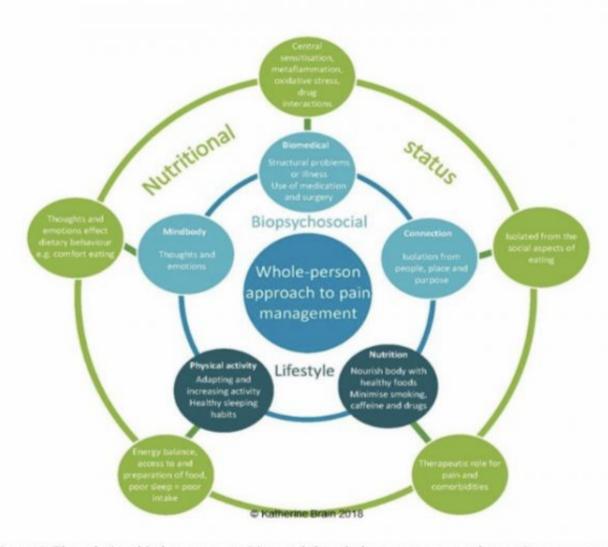


Figure 1: The relationship between nutrition and the whole-person approach to pain management

Tips for nutrition & pain management

Tips for Nutrition and Pain Management: dicas para nutrição e dor crônica segundo IASP Factsheet 2020.

- 1) Reduzir a inflamação e efeito oxidativo usando polifenóis presentes em frutas e vegetais. Frutas vermelhas são ótima opção.
- 2) Incluir gorduras de qualidade como Omega 3 e azeite de oliva que reduzem a inflamação e melhoram o sistema imune. Dicas: peixes como salmão e sardinha, nozes.
- 3) Prevenir déficit de vitaminas e minerais: principalmente vitamina D, B12, magnésio vitamina D.
- 4) Ingestão de água: A desidratação pode aumentar a sensibilidade à dor. Dica: Objetivo 2-3 litros / dia
- 5) Aumentar as fibras: importante para a digestão e manutenção adequada da flora intestinal e peso.
- 6) Reduzir e limitar a ingestão de alimentos e açúcares ultraprocessados: muitas calorias, baixo índice de nutrientes e aumento de inflamação.

Review

Diet and Headache: Part 2

Vincent T Martin et al. Headache. 2016 Oct.

Show details

Full-text links

Cite

•••

Abstract

Background: Comprehensive diets do not require the exclusion of a specific provocative food or ingredient, but regulate the quantities of core components of foods such as vitamins, ions, proteins, carbohydrates, and fats.

Objectives: To review the evidence supporting the use of comprehensive diets in the prevention of migraine and other headache disorders and to discuss the chanisms through which food, and ingredients within foods and beverages mig trigger attacks of headache METHODS: The

Results: Low fat and high omega-3/low omega-6 fatty diets decrease the frequency of attacks of migraine and/or other headache disorders as demonstrated in two separate randomized controlled trials. A ketogenic diet was more effective than a standard diet in reducing the frequency of migraine in a single nonrandomized clinical study. An observation study found that dietary consumption of folate was inversely associated with the frequency of migraine attacks in persons with migraine with aura that have the C variant of the methylene tetrahydrofolate reductase gene. The mechanisms though which diets may precipitate headache include their effects on neuropeptides, neuro-receptors and ion channels, inflammation, sympathetic nervous system, release of nitric oxide, vasodilation, and cerebral glucose metabolism.

Sleep Disorders and Migraine: Review of Literature and Potential Pathophysiology Mechanisms

Angeliki Vgontzas, MD and

John R. Graham Headache Center, Department of Neurology, Brigham and Women's Faulkner Hospital, Harvard Medical School, Boston, MA USA

Jelena M. Pavlović, MD, PhD

Montefiore Headache Center, Department of Neurology, Albert Einstein College of Medicine, Bronx, NY USA

Abstract

Migraine shares a complex and poorly understood relationship with sleep. Patients consistently report poor sleep prior to migraine attacks and during them, identifying poor sleep as a migraine trigger. However, anecdotally, sleep is reported to serve a therapeutic role in terminating headache. Are the associations between migraine and sleep simply the result of various bidirectional relationships? A growing body of evidence suggests there may be a common underlying etiology as well. Our objective was to review studies of sleep and migraine from the last 2 decades utilizing validated subjective and objective measures of sleep and to explore potential mechanisms underlying this complex relationship by incorporating recent advances in neuroscience. We specifically focus on insomnia, obstructive sleep apnea, parasomnias, sleep related movement disorders, and REM sleep related disorders and their relationship to migraine. Parts of brainstem-cortical networks involved in sleep physiology are unintentionally being identified as important factors in the common migraine pathway. Recent discoveries on anatomic localization (the hypothalamus as a key and early mediator in the pathophysiology of migraine), common mediating signaling molecules (such as serotonin and dopamine), and the discovery of a new CNS



DOES POOR SLEEP TRIGGER MIGRAINE ATTACK(S)?

Whether insomnia is part of the migraine prodrome or actually incites a migraine attack is a complicated and interesting question. In our review of the literature, we noted that frequent nighttime awakenings, but not objectively decreased total sleep time, precede sleep-related migraine attacks. Although it has long been suggested that poor sleep may lower pain thresholds in all humans, a recent study in normal volunteers found a significant loss of pain inhibition and an increase in spontaneous pain only in those with frequent awakenings (and not in those with partial sleep deprivation), suggesting that sleep continuity disturbance but not simple sleep restriction lowered pain thresholds.⁶⁹ What is the mechanism which might explain this observation? Serotonin (5-HT), which has diverse roles in many human behaviors including sleep, mood (depression and anxiety), appetite, sexual function, and pain, may be playing a joint function in this process. With respect to sleep, serotonin appears to promote wakefulness and inhibit REM sleep. With respect to migraine, the evidence suggests that individuals with migraine exist in a low serotonin state interictally, with mobilization of 5HT from intracellular stores early in a migraine attack.^{70,71} Given that patients with sleep-related migraine are found to have increased nighttime awakenings in the

Headache. Author manuscript; available in PMC 2019 May 20.



Iournal

Expert Review of Neurotherapeutics >

Volume 20, 2020 - Issue 3

162 2

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Review

Mindfulness in migraine: A narrative review

Rebecca Erwin Wells ≥, Elizabeth K. Seng,

Robert R. Edwards, David E. Victorson,

Charles R. Pierce, Lauren Rosenberg, ...show all

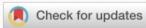
Pages 207-225 | Received 09 Dec 2019, Accepted 09 Jan 2020,

Accepted author version posted online: 14 Jan 2020, Published

online: 12 Feb 2020

66 Download citation

https://doi.org/10.1080/14737175.2020.1715212







Published in final edited form as:

Curr Pain Headache Rep.; 23(2): 10. doi:10.1007/s11916-019-0750-8.

Complementary and Integrative Medicine for Episodic Migraine: An Update of Evidence from the Last 3 Years

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Abstract

Objective — The purpose of this review is to evaluate evidence from the last three years on complementary and integrative medicine treatment options for episodic migraine.

Methods—Using Pubmed, Embase, and Cochrane databases, research published from 2015—2018 evaluating themodalities of mind/body therapies, supplements, and manual therapies for treatment of migraine were assessed.

Results-Although many studies had major methodological challenges that limit interpretation, several studies reported decreased headache frequency, improved quality of life, or less affective responses to pain. The evidence is currently most promising for the mind/body treatment options of mindfulness, yoga, and tai chi. Mindfulness meditation may be as effective as pharmacological treatment for medication overuse headache after the offending medication is withdrawn. While older research has shown magnesium, riboflavin, feverfew, and butterbur to be helpful in migraine treatment, new research is promising to suggest potential benefit with melatonin, Vitamin D, higher dosages of Vitamin B6 (80mg)/folic acid 5mg combinations, and the combination of Magnesium 112.5mg/CoQ10 100 mg/feverfew 100 mg. Omega 3's have limited evidence of efficacy in migraine. Butterbur needs to be free of Pyrrolidizine alkaloids (PA) to ensure safety given their hepatotoxicity. Physical therapy (PT) continues to have strong evidence of support, and acupuncture is superior to sham acupuncture and placebo. Side effects and risks reported were minimal and well-tolerated overall, with the exception of the life-threatening risk of cervical artery dissection with high-velocity chiropractic manipulation and hepatotoxicity with the PAs in butterbur. Several studies are ongoing to further evaluate mindfulness, melatonin, PT, exercise, chiropractic manipulation, and acupuncture. The American Academy of Neurology (AAN) and American Headache Society (AHS) are currently updating the guidelines for integrative treatment options for migraine, so additional recommendations may be available soon.

Conflicts



Corresponding Author: rewells@wakehealth.edu.

The authors declare that they have no conflicts of interest.

Grazzi, L., DAmico, D., Raggi, A.et al.

Mindfulness and pharmacological prophylaxis have comparable effect on biomarkers of inflammation and clinical indexes in chronic migraine with medication overuse: results at 12 months after withdrawal.

Neurol Sci 38, 173-175 (2017).

https://doi.org/10.1007/s10072-017-2874-0





Mind Full, or Mindful?







Research Submission

Meditation for Migraines: A Pilot Randomized Controlled Trial

Rebecca Erwin Wells MD, MPH ★,
Rebecca Burch MD ... See all authors >

First published:18 July 2014

https://doi.org/10.1111/head.12420

Citations: 67

Conflict of Interest: Timothy T. Houle: Dr. Houle receives research support from GlaxoSmithKline, Merck, and Depomed. All other authors report no conflicts of interest.

This clinical trial was registered 24 February 2012: clinicaltrials.gov identifier NCT01545466.



Effect of yoga as add-on therapy in migraine (CONTAIN)

A randomized clinical trial

Anand Kumar, MD, DM, Rohit Bhatia, MD, DM, DNB, Gautam Sharma, MD, DM, et al

Cite as: Neurology® 2020;94:e2203-e2212. doi:10.1212/WNL.00000000000009473

Correspondence Dr. Bhatia

rohitbhatia71@yahoo.com

Study objective and summary result

This study tested the hypothesis that yoga is an effective adjuvant therapy for patients with migraine, and the results showed that yoga is an effective adjuvant therapy.

Classification of evidence

Class III.

What is known and what this paper adds

Pharmacotherapy is the standard treatment strategy for migraine, but about half of patients are not optimally responsive to antimigraine drugs. This investigation's results provide evidence that yoga may reduce migraine attacks and its severities.

Participants and setting

The investigators recruited 160 patients with episodic migraine through the All India Institute of Medical Sciences (New Delhi, India) between April 2017 and August 2018. These individuals experienced 4-13 headache days per month and were 18-50 years old. Anyone who was taking pharmacotherapy needed to have been taking the same drugs for the past 3 months and to have maintained consistent doses for the past month.

Design, size, and duration

For this open-label, blinded outcome trial, (PROBE design) the investigators used computer-generated randomization with variable block sizes to assign the participants to groups receiving conventional medical therapy (n = 80) or conventional medical therapy plus a yoga intervention (n = 80). The yoga intervention involved a 1-month supervised yoga program and 2 subsequent months of at-home yoga. The investigators collected headache frequency, intensity, Headache Impact Test-6 (HIT-6) scores, Table Group-specific changes in key outcomes measures between the baseline and 3-month assessment timepoints

	Mean change ±SD in participants receiving		
Outcome	Standard treatment	Standard treatment plus yoga	
Headache frequency	-0.89 ± 2.27 mo ⁻¹	-4.41 ± 3.99 mo ⁻¹	
Headache intensity	-1.31 ± 2.05	-2.61 ± 2.45	
HIT-6 scores	-4.76 ± 8.23	-12.76 ± 12.04	

The participants reported headache intensities on a 0-10 scale, with higher numbers representing greater intensities. Higher HIT-6 scores represent greater impacts.

Main results and the role of chance

Of the 160 participants, 114 completed the trial. Relative to the participants who did not engage in yoga, those who did exhibited greater from-baseline reductions in headache frequencies (p < 0.0001) and intensities (p = 0.0004) and greater improvements in HIT-6 scores (p < 0.0001).

Harms

No serious adverse events occurred.

Bias, confounding, and other reasons for caution

The present study did not have a sham yoga group.

Generalizability to other populations

The present study's single-center nature may limit the gen-







Les AcM CGRP n'augmentent pas le risque de résultats CV négatifs chez les patients sans maladie CV

Résultats CV dans la classe des AcM CGRP			
Érénumab¹	Dans une étude de prolongation ouverte de 1 an d'un essai de phase 2, il n'y a pas eu de différence cliniquement significative dans les cardiopathies ischémiques/ effets indésirables cérébrovasculaires présentant un intérêt pour l'érénumab au fil du temps¹ L'érénumab n'a pas eu d'effet négatif sur la durée de l'exercice dans une population de patients à risque CV élevé² Dans un test sur tapis roulant incluant 88 patients avec une angine stable (44 ont reçu l'érénumab et 44 ont reçu le placebo)		
Galcanézumab ²	Aucune différence cliniquement significative n'a été observée pour les effets indésirables CV apparus durant le traitement, la pression artérielle, le pouls ou le QTcF entre les patients traités par le galcanézumab ou le placebo ³ • La durée maximale du traitement était de 6 mois		
Frémanézumab ³	Aucun signe relatif à l'innocuité CV n'était apparent, les effets indésirables CV apparaissant peu fréquemment et à des taux similaires dans tous les groupes traités par le frémanézumab ⁴ • La durée maximale du traitement était de 15 mois		

Ce tableau se veut un résumé des données d'essals cliniques individuels accessibles seulement; il ne permet pas de comparaison directe entre les essais.

Ashina, M. et al. Neurology, 2017, 89, p. 1-7. 2. Depre, C. et al. Heardsche, 2018, 58, p. 715-723. 3. Oakes, T. et al. Neurology, 2019, 92 (suppl. 15), p. P1.10-010. 4. Ning, X. et al. Neurology, 2019, 92 (suppl. 15), p. S17.005.

La American
Headache Society
recommande les
critères suivants
pour la continuation
d'un traitement par
un AcM CGRP:

Les directives de la European Headache Federation ne précisaient pas de critères de réponse clairs pour les AcM CGRP et indiquaient que le jugement clinique devait être exercé avant de décider d'interrompre le traitement².

La preuve des bienfaits d'un traitement peut être obtenue par au moins un des éléments ci-dessous¹

1

Réduction du nombre moyen de jours de céphalée par mois ≥ 50 % p/r au niveau de référence avant le traitement

 Documentation dans le journal ou attestation du fournisseur de soins de santé

OU

- Amélioration cliniquement significative de L'UNE OU L'AUTRE des mesures de résultat spécifiques à la migraine validées et déclarées par le patient :
 - MIDAS (réduction ≥ 5 points lorsque le score initial est de 11 à 20; réduction ≥ 30 % lorsque le score initial est supérieur à 20)
 - MPFID (réduction ≥ 5 points)
 - HIT-6 (réduction ≥ 5 points)

Dosage recommandé pour la classe des AcM CGRP

	Érénumab¹	Galcanézumab²	Frémanézumab³		
Dose recommandée	Dose mensuelle : 70 mg Une dose de 140 mg une fois par mois peut être bénéfique pour certains patients	Dose d'attaque : 240 mg (2x120 mg) Dose mensuelle : 120 mg	Dose mensuelle : 225 mg Dose trimestrielle : 675 mg (3 x 225 mg)		
Ajustements posologiques	Augmentation progressive de la dose non requise				
Forme pharmaceutique	Auto-injecteur prérempli	Stylo prérempli ou seringue préremplie	Seringue préremplie		
	Auto-administration (formation pour l'injection requise pour tous les patients)				
Stabilité à la température ambiante	14 jours	7 jours	24 heures		

Ce tableau se veut un résumé des monographies de produits et des renseignements posologiques accessibles; il ne permet pas de comparaison directe entre les produits.

La classe des AcM CGRP n'est associée à aucune interaction médicamenteuse connue à ce jour, donc aucun ajustement de la posologie ne devrait être nécessaire pour les autres médicaments au début du traitement¹⁻³.

Efficacy and Tolerability of CGRP Monoclonal Antibody Medications in Patients with Chronic Migraine Undergoing Treatment with OnabotulinumtoxinA

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