Table des matières

Headache

Céphalées : évaluation de l'acupuncture

Articles connexes: - migraines - céphalées de tension - céphalées neurovasculaires - conduites thérapeutiques - pathologies - qigong - acupuncture expérimentale -

1. Systematic Reviews and Meta-Analysis

☆☆☆	Evidence for specific efficacy and efficacy of acupuncture
☆☆	Evidence for efficacy of acupuncture
☆	Limited evidence for efficacy of acupuncture
Ø	Lack of evidence or insufficient evidence

1.1. Generic Acupuncture

1.1.1. Singh 2020 ☆

Singh RBH, VanderPluym JH, Morrow AS, Urtecho M, Nayfeh T, Roldan VDT, Farah MH, Hasan B, Saadi S, Shah S, Abd-Rabu R, Daraz L, Prokop LJ, Murad MH, Wang Z. Acute Treatments for Episodic Migraine [Internet]. Rockville (MD): Agency for Healthcare Research and Quality (US). 2020. [217696]. doi

Objectives	To evaluate the effectiveness and comparative effectiveness of pharmacologic and nonpharmacologic therapies for the acute treatment of episodic migraine in adults. Data sources MEDLINE®, Embase®, Cochrane Central Registrar of Controlled Trials, Cochrane Database of Systematic Reviews, PsycINFO®, Scopus, and various grey literature sources from database inception to July 24, 2020. Comparative effectiveness evidence about triptans and nonsteroidal anti-inflammatory drugs (NSAIDs) was extracted from existing systematic reviews.
Review methods	We included randomized controlled trials (RCTs) and comparative observational studies that enrolled adults who received an intervention to acutely treat episodic migraine. Pairs of independent reviewers selected and appraised studies.

Results	Data on triptans were derived from 186 RCTs summarized in nine systematic reviews (101,276 patients; most studied was sumatriptan, followed by zolmitriptan, eletriptan, naratriptan, almotriptan, rizatriptan, and frovatriptan). Compared with placebo, triptans resolved pain at 2 hours and 1 day, and increased the risk of mild and transient adverse events (high strength of the body of evidence [SOE]). Data on NSAIDs were derived from five systematic reviews (13,214 patients; most studied was ibuprofen, followed by diclofenac and ketorolac). Compared with placebo, NSAIDs probably resolved pain at 2 hours and 1 day, and increased the risk of mild and transient adverse events (moderate SOE). For other interventions, we included 135 RCTs and 6 comparative observational studies (37,653 patients). Compared with placebo, antiemetics (low SOE), dihydroergotamine (moderate to high SOE), ergotamine plus caffeine (moderate SOE), and acetaminophen (moderate SOE) reduced acute pain. Opioids were evaluated in 15 studies (2,208 patients). Butorphanol, meperidine, morphine, hydromorphone, and tramadol in combination with acetaminophen may reduce pain at 2 hours and 1 day, compared with placebo (low SOE). Some opioids may be less effective than some antiemetics or dexamethasone (low SOE). No studies evaluated instruments for predicting risk of opioid misuse, opioid use disorder, or overdose, or evaluated risk mitigation strategies to be used when prescribing opioids for the acute treatment of episodic migraine. Calcitonin gene-related peptide (CGRP) receptor antagonists improved headache relief at 2 hours and increased the likelihood of being headache-free at 2 hours, at 1 day, and at 1 week (low to high SOE). Lasmiditan (the first approved 5-HT1F receptor agonist) restored function at 2 hours and resolved pain at 2 hours, 1 day, and 1 week (moderate to high SOE). Sparse and low SOE suggested possible effectiveness of dexamethasone, dipyrone, magnesium sulfate, and octreotide. Compared with placebo, several nonpharmacologic treatments may improve various measures of pain, including remote electrical neuromodulation (moderate SOE), magnetic stimulation (low SOE), **acupuncture** (low SOE), chamomile oil (low SOE), external trigeminal nerve stimulation (low SOE), and eye movement desensitization re-processing (low SOE). However, these interventions, including the noninvasive neuromodulation devices, have been evaluated only by single or very few trials.
Conclusions	A number of acute treatments for episodic migraine exist with varying degrees of evidence for effectiveness and harms. Use of triptans, NSAIDs, antiemetics, dihydroergotamine, CGRP antagonists, and lasmiditan is associated with improved pain and function. The evidence base for many other interventions for acute treatment, including opioids, remains limited

1.1.2. Vickers 2018 ★★★

Vickers AJ, Vertosick EA, Lewith G et al, Acupuncture Trialists' Collaboration. Acupuncture for Chronic Pain: Update of an Individual Patient Data Meta-Analysis. J Pain. 2018 May;19(5):455-474. [168043]

Purpose	Our objective was to update an individual patient data meta-analysis to determine the effect size of acupuncture for 4 chronic pain conditionss.
Methods	We searched MEDLINE and the Cochrane Central Registry of Controlled Trials randomized trials published up until December 31, 2015. We included randomized trials of acupuncture needling versus either sham acupuncture or no acupuncture control for nonspecific musculoskeletal pain, osteoarthritis, chronic headache, or shoulder pain. Trials were only included if allocation concealment was unambiguously determined to be adequate. Raw data were obtained from study authors and entered into an individual patient data meta-analysis.

Results	The main outcome measures were pain and function. An additional 13 trials were identified, with data received for a total of 20,827 patients from 39 trials. **Acupuncture was superior to sham as well as no acupuncture control for each pain condition (all P < .001) with differences between groups close to .5 SDs compared with no acupuncture control and close to .2 SDs compared with sham. We also found clear evidence that the effects of acupuncture persist over time with only a small decrease, approximately 15%, in treatment effect at 1 year.** In secondary analyses, we found no obvious association between trial outcome and characteristics of acupuncture treatment, but effect sizes of acupuncture were associated with the type of control group, with smaller effects sizes for sham controlled trials that used a penetrating needle for sham, and for trials that had high intensity of intervention in the control arm. **We conclude that acupuncture is effective for the treatment of chronic pain, with treatment effects persisting over time.** Although factors in addition to the specific effects of needling at correct acupuncture point locations are important contributors to the treatment effect, decreases in pain after acupuncture cannot be explained solely in terms of placebo effects. Variations in the effect size of acupuncture in different trials are driven predominantly by differences in treatments received by the control group rather than by differences in the characteristics of acupuncture treatment.
Perspective	**Acupuncture is effective for the treatment of chronic musculoskeletal, headache, and osteoarthritis pain. Treatment effects of acupuncture persist over time and cannot be explained solely in terms of placebo effects.** Referral for a course of acupuncture treatment is a reasonable option for a patient with chronic pain..

1.1.3. Sun 2012 ☆☆☆

Sun Yan-Xia, Wang Nan, Li Tian-Zuo. [Application of acupuncture in the treatment of chronic headache: A meta-analysis]. Journal of Capital University of Medical Sciences. 2012;4:508-512. [186985].

Objective	To evaluate the efficacy of acupuncture for treatment of chronic headache.
Methods	The following databases were searched for randomized controlled trials on the use of acupuncture for chronic headache: Medline (1966~2011), CINAHL, Cochrane Central Register of Controlled Trials and Scopus. Studies were included if they enrolled adults with chronic headache and were randomized to receive needling acupuncture treatment or sham acupuncture. The data on headache intensity, frequency and response rate were extracted for analysis.
Results	**Seventeen trials** were included in this review. The majority of included trials showed a trend in favor of acupuncture. The combined response rate in the acupuncture group was significantly higher as compared with sham acupuncture either at the early follow-up period (risk ratio (RR)=1. 19, 95% confidence interval (CI): 1. 08~1. 30) or late follow-up period (RR=1. 22, 95% CI: 1. 04~1. 43).
Conclusion	**Needling acupuncture was superior to sham acupuncture in management of chronic headache**.

1.1.4. Vickers 2012 ☆☆☆

Vickers AJ, Cronin AM, Maschino AC, et al; Acupuncture Trialists'Collaboration. Acupuncture for chronic pain: individual patient data meta-analysis. Arch Intern Med 2012;172:1444-53. [157530]

Purpose	We aimed to determine the effect size of acupuncture for 4 chronic pain conditions: back and neck pain, osteoarthritis, **chronic headache**, and shoulder pain.
Methods	We conducted a systematic review to identify randomized controlled trials (RCTs) of acupuncture for chronic pain in which allocation concealment was determined unambiguously to be adequate. Individual patient data meta-analyses were conducted using data from **29 of 31 eligible RCTs, with a total of 17 922 patients** analyzed.
Results	In the primary analysis, including all eligible RCTs, **acupuncture was superior to both sham and noacupuncture control for each pain condition** (P< .001 for all comparisons). After exclusion of an outlying set of RCTs that strongly favored acupuncture, the effect sizes were similar across pain conditions. **Patients receiving acupuncture had less pain, with scores that wer**e 0.23(95% CI, 0.13-0.33),0.16 (95% CI, 0.07-0.25), and **0.15 (95% CI, 0.07-0.24)** SDs lower than sham controls for back and neck pain, osteoarthritis, and **chronic headache**, respectively; the effect sizes in comparison to noacupuncture controls were 0.55 (95% CI, 0.51-0.58), 0.57(95% CI, 0.50-0.64), and 0.42 (95% CI, 0.37-0.46) SDs. These results were robust to a variety of sensitivity analyses, including those related to publication bias.
Conclusion	**Acupuncture is effective for the treatment of chronic pain and is therefore a reasonable referral option. Significant differences between true and sham acupuncture indicate that acupuncture is more than a placebo**. However, these differences are relatively modest, suggesting that factors in addition to the specifice effects of needling are important contributors to the therapeutic effects of acupuncture.

1.1.5. Sun 2008 ☆☆☆

Sun Y, Gan Tj. Acupuncture for the management of chronic headache: a systematic review. Anesth Analg. 2008;107(6):2038-47. [153122].

Objectives	The objective of this review was to evaluate the efficacy of acupuncture for treatment of chronic headache.
Methods	We searched the databases of Medline (1966-2007), CINAHL, The Cochrane Central Register of Controlled Trials (2006), and Scopus for randomized controlled trials investigating the use of acupuncture for chronic headache. Studies were included in which adults with chronic headache, including migraine, tension-type headache or both, were randomized to receive needling acupuncture treatment or control consisting of sham acupuncture, medication therapy, and other nonpharmacological treatments. We extracted the data on headache intensity, headache frequency, and response rate assessed at early and late follow-up periods.
Results	**Thirty-one studies** were included in this review. The majority of included trials comparing true acupuncture and sham acupuncture showed a trend in favor of acupuncture. The combined response rate in the acupuncture group was significantly higher compared with sham acupuncture either at the early follow-up period (risk ratio [RR]: 1.19, 95% confidence interval [CI]: 1.08, 1.30) or late follow-up period (RR: 1.22, 95% CI: 1.04, 1.43). Combined data also showed acupuncture was superior to medication therapy for headache intensity (weighted mean difference: -8.54 mm, 95% CI: -15.52, -1.57), headache frequency (standard mean difference: -0.70, 95% CI: -1.38, -0.02), physical function (weighted mean difference: 4.16, 95% CI: 1.33, 6.98), and response rate (RR: 1.49, 95% CI: 1.02, 2.17).
Conclusion	**Needling acupuncture is superior to sham acupuncture and medication therapy in improving headache intensity, frequency, and response rate**.

1.1.6. Melchart 2001 ☆

Melchart D, Linde K, Fischer P, Berman B, White A, Vickers A, Allais G. Acupuncture for idiopathic headache. Cochrane Database Syst Rev. 2001;(1). [101016].

Background	Acupuncture is widely used for the treatment of headache, but its effectiveness is controversial.
Objectives	To determine whether acupuncture is more effective than no treatment, more effective than 'sham' (placebo) acupuncture, as effective as other interventions used to treat idiopathic (primary) headaches.
Methods	Search strategy: Electronic searches were performed in MEDLINE, EMBASE, the Cochrane Controlled Trials Register, and the database of the Cochrane Field for Complementary Medicine. We also contacted researchers in the field and checked the bibliographies of all articles obtained. Selection criteria: Randomized or quasi-randomized clinical trials comparing acupuncture with any type of control intervention for the treatment of idiopathic (primary) headaches were included. Data collection and analysis: Information on patients, interventions, methods, and results was extracted by at least two independent reviewers using a pre-tested standard form. Results on headache frequency and intensity were summarized descriptively. Responder rate ratios (responder rate in treatment group/responder rate in control group) were calculated as a crude indicator of results for sham-acupuncture-controlled trials. Quantitative meta-analysis was not possible due to trial heterogeneity and insufficient reporting.
Main results	**Twenty-six trials including a total of 1151 patients** (median, 37; range, 10-150) met the inclusion criteria. Sixteen trials were conducted among patients with migraine, six among patients with tension-type headache, and four among patients with various types of headaches. The majority of trials had methodological and/or reporting shortcomings. In eight of the 16 trials comparing true and sham (placebo) acupuncture in migraine and tension-type headache patients, true acupuncture was reported to be significantly superior; in four trials there was a trend in favor of true acupuncture; and in two trials there was no difference between the two interventions. (Two trials were uninterpretable.) The 10 trials comparing acupuncture with other forms of treatment yielded contradictory results.
Reviewers' conclusions	Overall, the existing evidence supports the value of acupuncture for the treatment of idiopathic headaches. However, the quality and amount of evidence are not fully convincing. There is an urgent need for well-planned, large-scale studies to assess the effectiveness and cost-effectiveness of acupuncture under real-life conditions.

1.1.7. Manias 2000 ☆

Manias P Et al. Acupuncture in headache: a critical review. Clinical Journal Of Pain. 2000;16(4):334-9. [87283].

> **Twenty-seven clinical trials** that evaluated the efficacy of acupuncture in the treat ment of primary headaches (migraine headache, tension-type headache, and mixed forms) were reviewed. In the majority of the trials (23 of the 27 trials), **it was concluded that acupuncture offers benefits in the treatment of headaches**. Conversely, the evaluation of physical forms of treatment, including acupuncture, has special difficulties, and certain parameters in the study design need consideration. Acupuncture methods need individualization, a carefully selected placebo (“minimal acupuncture” seems to be best), and the crossover design must have adequate time between the two treatment periods. Clinical trials that evaluate acupuncture frequently are characterized by several inadequacies (including some from these evaluating headaches), but it seems that additional clinical research is necessary to confirm its efficacy and to clarify its indications.

1.1.8. Melchart 1999 ☆

Melchart D et al. Acupuncture for recurrent headaches: a systematic review of randomized controlled trials. Cephalalgia. 1999;19(9):779-86.[70889] .

Objective	To assess whether there is evidence that acupuncture is tretreatment of recurrent headaches.
Méthods	systematic review. Study selection: Randomized or quasi-randomized clinical trials comparing acupuncture with any type of control intervention for the treatment of recurrent headaches. Data sources: Electronic databases (Medline, Embase, Cochrane Field for Complementary Medicine, Cochrane Controlled Trials Register), personal communications and bibliographies. Data collection and analysis: Inform. methods, and results were extracted by at least two independent reviewers using a pretested form. A pooled estimate of the responder rate ratio (responder rate in treatment group/responder rate in control group) was calculated as a crude indicator of trial results as meta-analysis of more specific outcome data was impossible due to heterogeneity and insufficient reporting.
Results	**Twenty-two trials, including a total of 1042 patients** (median 36, range 10-150), met the inclusion criteria. Fifteen trials were in migraine patients, six in tension-headache patients, and in one trial patients with various headaches were included. The majority of the 14 trials comparing true and sham acupuncture showed at least a trend in favor of true acupuncture. The pooled responder rate ratio was 1.53 (95% confidence interval 1.11 to 2.11). The eight trials comparing acupuncture and other treatment forms had contradictory results.
Conclusions	Overall, **the existing evidence suggests that acupuncture has a role in the treatment of recurrent headaches**. However, the quality and amount of evidence is not fully convincing. There is urgent need for well-planned, large-scale studies to assess effectiveness and efficiency of acupuncture under real life conditions.

1.2. Special Clinical Forms

1.2.1. Migraine

See corresponding item

1.2.2. Tension-type Headache

see corresponding item

1.2.3. Neurovascular Headache

See corresponding item

1.2.4. Headache during pregnancy

1.2.4.1. Bushman 2021

Bushman ET, Cozzi G, Sinkey RG, Smith CH, Varner MW, Digre K. Randomized Controlled Trials of Headache Treatments in Pregnancy: A Systematic Review. Am J Perinatol. 2021 Aug;38(S 01):e102-e108. https://doi.org/10.1055/s-0040-1705180

Objective	Headaches affect 88% of reproductive-aged women. Yet data are limited addressing treatment of headache in pregnancy. While many women experience improvement in pregnancy, primary and secondary headaches can develop. Consequently, pregnancy is a time when headache diagnosis can influence maternal and fetal interventions. This study was aimed to summarize existing randomized control trials (RCTs) addressing headache treatment in pregnancy.
Study Design	We searched PubMed, CINAHL, EMBASE, ClinicalTrials.gov, Cochrane Library, CINAHL, and SCOPUS from January 1, 1970 through June 31, 2019. Studies were eligible if they were English-language RCTs addressing treatment of headache in pregnancy. Conference abstracts and studies investigating postpartum headache were excluded. Three authors reviewed English-language RCTs addressing treatment of antepartum headache. To be included, all authors agreed each article to meet the following criteria: predefined control group, participants underwent randomization, and treatment of headache occurred in the antepartum period. If inclusion criteria were met no exclusions were made. Our systematic review registration number was CRD42019135874.
Results	A total of 193 studies were reviewed. Of the three that met inclusion criteria all were small, with follow-up designed to measure pain reduction and showed statistical significance.
Conclusion	Our systematic review of RCTs evaluating treatment of headache in pregnancy revealed only three studies. This paucity of data limits treatment, puts women at risk for worsening headache disorders, and delays diagnosis placing both the mother and fetus at risk for complications.
Acupuncture	One RCT. The results suggest a benefit of acupuncture for treatment of tension headache in pregnancy.

1.2.4.2. Saldanha 2021 Ø

Saldanha IJ, Cao W, Bhuma MR, Konnyu KJ, Adam GP, Mehta S, Zullo AR, Chen KK, Roth JL, Balk EM. Management of primary headaches during pregnancy, postpartum, and breastfeeding: A systematic review. Headache. 2021;61(1):11-43. [213516].

Background	Primary headaches (migraine, tension headache, cluster headache, and other trigeminal autonomic cephalgias) are common in pregnancy and postpartum. It is unclear how to best and most safely manage them.
Objective	We conducted a systematic review (SR) of interventions to prevent or treat primary headaches in women who are pregnant, attempting to become pregnant, postpartum, or breastfeeding.
Methods	We searched Medline, Embase, Cochrane CENTRAL, CINAHL, ClinicalTrials.gov, Cochrane Database of SRs, and Epistemonikos for primary studies of pregnant women with primary headache and existing SRs of harms in pregnant women regardless of indication. No date or language restrictions were applied. We assessed strength of evidence (SoE) using standard methods.

Results	We screened 8549 citations for studies and 2788 citations for SRs. Sixteen studies (mostly high risk of bias) comprising 14,185 patients (total) and 26 SRs met the criteria. For prevention, we found no evidence addressing effectiveness. Antiepileptics, venlafaxine, tricyclic antidepressants, benzodiazepines, β-blockers, prednisolone, and oral magnesium may be associated with fetal/child adverse effects, but calcium channel blockers and antihistamines may not be (1 single-group study and 11 SRs; low-to-moderate SoE). For treatment, combination metoclopramide and diphenhydramine may be more effective than codeine for migraine or tension headache (1 randomized controlled trial; low SoE). Triptans may not be associated with fetal/child adverse effects (8 nonrandomized comparative studies; low SoE). Acetaminophen, prednisolone, indomethacin, ondansetron, antipsychotics, and intravenous magnesium may be associated with fetal/child adverse effects, but low-dose aspirin may not be (indirect evidence; low-to-moderate SoE). We found insufficient evidence regarding non-pharmacologic treatments [**acupuncture**].
Conclusions	For prevention of primary headache, calcium channel blockers and antihistamines may not be associated with fetal/child adverse effects. For treatment, combination metoclopramide and diphenhydramine may be more effective than codeine. Triptans and low-dose aspirin may not be associated with fetal/child adverse effects. Future research should identify effective and safe interventions in pregnancy and postpartum.

1.3. Special Acupuncture Techniques

1.3.1. Cupping

1.3.1.1. Seo 2021

Seo J, Chu H, Kim CH, Sung KK, Lee S. Cupping Therapy for Migraine: A PRISMA-Compliant Systematic Review and Meta-Analysis of Randomized Controlled Trials. Evid Based Complement Alternat Med. 2021. [218237]. doi

Background	Migraine is a common reason for primary headache disorders. Cupping is a frequently used traditional intervention for controlling pain including migraine. There have been no systematic reviews on the clinical effects of cupping on migraine.
Objective	This systematic review and meta-analysis aimed to evaluate the effectiveness of cupping therapy for migraine.
Method	The search strategy was built for the presence of related keywords, such as “migraine” and “cupping therapy”, in the title and abstract of research articles indexed in the MEDLINE, EMBASE, CENTRAL, and other databases. The randomized controlled trials (RCTs) of cupping therapy for migraine were searched and selected from inception to May 2019. We searched eight databases including PubMed, EMBASE, Cochrane Central Register of Controlled Trials. The selection process and the quality assessment were performed by 2 authors independently. The meta-analysis was conducted, and qualitative analysis was also performed.
Results	218 studies were identified, and **6 RCTs** were enrolled in this review. In comparison to drugs, wet cupping showed a higher total effective rate (TER). In the dry cupping plus acupuncture, the result of TER showed more effectiveness (RR 1.05, 95% CI 0.99 to 1.12, P=0.13) compared with acupuncture alone, but there was no statistically significant difference. In qualitative analysis, the results showed wet cupping plus drugs treatment could quickly relieve pain and significantly improve patients' quality of life and wet cupping could reduce headache pain.

Conclusion	Cupping therapy could be effective for the treatment of migraine. However, the qualities of the evidence were low, so well-designed RCTs are needed to confirm the effectiveness of cupping. Systematic review registration: PROSPERO registration number is CRD42017054979.

2. Overviews of Systematic Reviews

2.1. Millstine 2017 ☆☆

Millstine D, Chen CY, Bauer B. Complementary and integrative medicine in the management of headache. BMJ. 2017. [142238].

> Headaches, including primary headaches such as migraine and tension-type headache, are a common clinical problem. Complementary and integrative medicine (CIM), formerly known as complementary and alternative medicine (CAM), uses evidence informed modalities to assist in the health and healing of patients. CIM commonly includes the use of nutrition, movement practices, manual therapy, traditional Chinese medicine, and mind-body strategies. This review summarizes the literature on the use of CIM for primary headache and is based on five meta-analyses, seven systematic reviews, and 34 randomized controlled trials (RCTs). The overall quality of the evidence for CIM in headache management is generally low and occasionally moderate. Available evidence suggests that traditional Chinese medicine including acupuncture, massage, yoga, biofeedback, and meditation have a positive effect on migraine and tension headaches. Spinal manipulation, chiropractic care, some supplements and botanicals, diet alteration, and hydrotherapy may also be beneficial in migraine headache. CIM has not been studied or it is not effective for cluster headache. Further research is needed to determine the most effective role for CIM in patients with headache.

3. Clinical Practice Guidelines

⊕ positive recommendation (regardless of the level of evidence reported)
Ø negative recommendation (or lack of evidence)

3.1. Department of Veterans Affairs (VA/DoD, USA) 2023 Ø

Department of Veterans Affairs. VA/DoD Clinical practice guideline for management of headache. Washington: VA/DoD. 2023:255P. https://www.healthquality.va.gov/guidelines/pain/headache/VA-DoD-CPG-Headache-Full-CPG.pdf Sico JJ, Antonovich NM, Ballard-Hernandez J, Buelt AC, Grinberg AS, Macedo FJ, Pace IW, Reston J, Sall J, Sandbrink F, Skop KM, Stark TR, Vogsland R, Wayman L, Ford AW. 2023 U.S. Department of Veterans Affairs and U.S. Department of Defense Clinical Practice Guideline for the Management of Headache. Ann Intern Med. 2024 Oct 29. https://doi.org/10.7326/annals-24-00551

There is insufficient evidence to recommend for or against acupuncture, dry needling, or yoga for the treatment and/or prevention of headache. (Neither for nor against - Reviewed, New-replaced)

3.2. American Society of Regional Anesthesia and Pain Medicine (ASRA) and Multisociety, International Working Group (Postdural Puncture Headache) 2023 Ø

- Uppal V, Russell R, Sondekoppam R, Ansari J, Baber Z, Chen Y, DelPizzo K, Dîrzu DS, Kalagara H,

Kissoon NR, Kranz PG, Leffert L, Lim G, Lobo CA, Lucas DN, Moka E, Rodriguez SE, Sehmbi H, Vallejo MC, Volk T, Narouze S. Consensus Practice Guidelines on Postdural Puncture Headache From a Multisociety, International Working Group: A Summary Report. JAMA Netw Open. 2023 Aug 1;6(8):e2325387. https://doi.org/10.1001/jamanetworkopen.2023.25387
- Uppal V, Russell R, Sondekoppam RV, Ansari J, Baber Z, Chen Y, DelPizzo K, Dirzu DS, Kalagara H, Kissoon NR, Kranz PG, Leffert L, Lim G, Lobo C, Lucas DN, Moka E, Rodriguez SE, Sehmbi H, Vallejo MC, Volk T, Narouze S. Evidence-based clinical practice guidelines on postdural puncture headache: a consensus report from a multisociety international working group. Reg Anesth Pain Med. 2023 Aug 15:rapm-2023-104817. https://doi.org/10.1136/rapm-2023-104817

Evidence does not support routine use of acupuncture to treat PDPH (evidence grade: I; level of certainty: low).

3.3. German Society of Neurology (DGN) and the German Migraine and Headache Society (DMKG) 2022 [medication overuse headache (MOH)] ∅

Diener HC, Kropp P, Dresler T, Evers S, Förderreuther S, Gaul C, Holle-Lee D, May A, Niederberger U, Moll S, Schankin C, Lampl C. Management of medication overuse (MO) and medication overuse headache (MOH) S1 guideline. Neurol Res Pract. 2022 Aug 29;4(1):37. https://doi.org/10.1186/s42466-022-00200-0.

Smaller studies that investigated the efficacy of valproic acid, cannabinoids, Pregabalin, **acupuncture**, and stimulation of the greater occipital nerve in MOH. Due to the methodological weaknesses of these studies, the results are not conclusive and these therapies cannot be recommended. Beta-blockers,

3.4. American College of Obstetricians and Gynecologists (ACOG, USA) 2022 [Headaches in Pregnancy] ∅

American College of Obstetricians and Gynecologists. Headaches in Pregnancy and Postpartum: ACOG Clinical Practice Guideline No. 3. Obstet Gynecol. 2022;139(5):944-72. [212346]. https://doi.org/10.1097/aog.0000000000004766

Stress-reduction measures, avoidance of triggers, adequate sleep, adequate hydration, **acupuncture**, cognitive behavioral therapy. Insufficient evidence to support efficacy. No known risks.

3.5. American Academy of Family Physicians (AAFP, USA) 2021 ⊕

AAFP Chronic Pain Toolkit. American Academy of Family Physicians. 2021. [188191]. URL

Chronic pain : Non-opioid analgesics, physical therapy, cognitive behavioral therapy, rehabilitation, exercise, integrative medical therapies (e.g., yoga, relaxation, tai chi, massage, and **acupuncture**), opioids on a case-by-case basis.
Acupuncture : indications Low back pain, fibromyalgia, **chronic headache**, neck pain. Magnitude to benefit pain and function: small to moderate.

3.6. Committee for Clinical Practice Guideline for the Management of Chronic

Pain (Japan) 2021 ⊕

The Committee for Clinical Practice Guideline for the Management of Chronic Pain. Clinical Practice Guidelines For the Management of Chronic Pain . Tokyo: Pub- lication Department of Medical Books, Shinko Trading Co. Ltd.; 2021 . *Cited by* Okawa Y, Yamashita H, Masuyama S, Fukazawa Y, Wakayama I. Quality assessment of Japanese clinical practice guidelines including recommendations for acupuncture. Integr Med Res. 2022 Sep;11(3):100838. https://doi.org/10.1016/j.imr.2022.100838

Weak recommendation (of implementation) for chronic migraine and tension type headache.

3.7. Japanese Society of Neurology, Japanese Headache Society, Japanese Society of Neurological Therapeutics (Japan) 2021 ⊕

Japanese Society of Neurology. The Japanese Headache Society, Japanese Society of Neurological Therapeutics. Zutsu no Shinryo Gaidorain [Clinical Practice Guidelines For headache, 2021] . Tokyo: Igaku Shoin Ltd.; 2021 [in Japanese]. Cited by Okawa Y, Yamashita H, Masuyama S, Fukazawa Y, Wakayama I. Quality assessment of Japanese clinical practice guidelines including recommendations for acupuncture. Integr Med Res. 2022 Sep;11(3):100838. https://doi.org/10.1016/j.imr.2022.100838

Acupuncture. *Prevention of migraines:*Recommendation to use (Weak). *Tension type headache*: Recommendation to use (Weak). *Acute migraines*: Recommendation to use (Weak)

3.8. Post-Dural Puncture Headache: American Society of Anesthesiologists (ASA, USA) 2021 Ø

Statement on Post-Dural Puncture Headache Management. American Society of Anesthesiologists. 2021;:. [219454]. https://www.asahq.org/standards-and-guidelines/statement-on-post-dural-puncture-headache-management

There is currently insufficient evidence to recommend the use of acupuncture, greater occipital nerve blocks, sphenopalatine ganglion blocks, epidural morphine, and prophylactic intrathecal morphine via an intrathecal catheter after UDP in the treatment of obstetric PDPH.

3.9. Agency for Healthcare Research and Quality (AHRQ, USA) 2020 Ø

Saldanha IJ, Roth JL, Chen KK, Zullo AR, Adam GP, Konnyu KJ, Cao W, Bhuma MR, Kimmel HJ, Mehta S, Riester MR, Sorial MN, Balk EM. Management of Primary **Headaches in Pregnancy** [Internet]. Rockville (MD): Agency for Healthcare Research and Quality (US). 2020. [211229]. doi

There is insufficient evidence to make conclusions about the benefits or harms of nonpharmacologic treatments used during pregnancy, including **acupuncture** (1 RCT); biofeedback, relaxation therapy, and physical therapy (1 RCT and 2 single-group studies); nerve blocks (1 single-group study); and transcranial magnetic stimulation (1 single-group study)

3.10. Department of Veterans Affairs (VA/DoD, USA) 2020 Ø

Department of Veterans Affairs. VA/DoD clinical practice guideline for the primary care management of headache. Washington: VA/DoD. 2020:150P. [219305]. doi

Recommendation : There is insufficient evidence to recommend for or against acupuncture for the treatment of headache. Strenght: Neither for nor against.

3.11. Ministry of Public Health of Qatar (MOPH, Qatar) 2020 ⊕

Headache in adults. National Clinical Guidelines . Ministry of Public Health of Qatar (MOPH). 2020;:. [219468]. URL

Tension Type Headache. Acupuncture − consider a course of up to 10 sessions over 5-8 weeks (Level 2, grade A2).
Migraine. Acupuncture : A course of up to 10 sessions of acupuncture over 5-8 weeks (Level 2, grade A1).

3.12. American College of Emergency Physicians (ACEP, USA) 2019 ⊕

American College of Emergency Physicians Clinical Policies Subcommittee (Writing Committee) on **Acute Headache**.Godwin SA, Cherkas DS, Panagos PD, Shih RD, Byyny R, Wolf SJ. Clinical Policy: Critical Issues in the Evaluation and Management of Adult Patients Presenting to the Emergency Department With Acute Headache. Ann Emerg Med. 2019;74(4):e41-74. [210818]. doi

Given the high incidence of post-ED headache recurrence, patient care plans that begin in the ED must not only consider medication treatment but also incorporate evidence-based protocols for alternative pain management techniques, including nerve blocks, **acupuncture**, distraction, relaxation, and other potentially nontraditional treatment strategies .

3.13. American Chronic Pain Association (ACPA, USA) 2019 ⊕

American Chronic Pain Association Resource Guide to Chronic Pain management, An Integrated Guide to Medical, Interventional, Behavioral Pharmacologic and Rehabilitation Therapies. Feinberg S (ed.) American Chronic Pain Association Inc., Rocklin, California. 2019:156p. [219425]. URL

Acupuncture has been gaining popularity in the United States since the 1970s, and, in wake of increasing acceptance by both the public and medical professionals, it is now covered by many insurance policies. In the field of chronic pain medicine, there is a strong body of research supporting the efficacy of acupuncture for **headache**, osteoarthritis, and musculoskeletal conditions, such as neck and lower back pain

3.14. European Headache Federation (EHF) 2019 ⊕

Steiner TJ, Jensen R, Katsarava Z, Linde M, MacGregor EA, Osipova V, Paemeleire K, Olesen J, Peters M, Martelletti P. Aids to management of headache disorders in primary care (2nd edition) : on behalf of the European Headache Federation and Lifting The Burden: the Global Campaign against Headache. J Headache Pain. 2019;20(1):57. [200002].

Prophylactic management of episodic migraine: Acupuncture has differing forms, and is highly dependent on the skill of the therapist. There is limited evidence that acupuncture can be effective in reducing intensity and frequency of migraine attacks, but large clinical trials have failed to distinguish between acupuncture and sham procedures. Benefits experienced by some patients may be attributable to placebo effect.
Tension Type Headache (TTH): There is limited evidence that acupuncture is effective in reducing intensity and frequency of TTH episodes. While some patients experience benefit, this may be due to placebo effect. Acupuncture has differing forms, and is highly dependent on the skill of the therapist.

3.15. National Health Service, Scottish Government (Scotland) 2018 ⊕ (children)

Management of Chronic Pain in Children and Young People. A National Clinical Guideline. NHS, Scottish Government. 2018;:69p. [196021].

Acupuncture may be considered for managing chronic pain in children and young people, for back pain and headache. If used, efficacy should be formally assessed.

3.16. Aetna (insurance provider, USA) 2018 ⊕

Acupuncture. Aetna (insurance provider, USA). 2018. 73P. [188029].

Aetna considers needle acupuncture (manual or electroacupuncture) medically necessary for any of the following indications:**Chronic (minimum 12 weeks duration) headache**

3.17. Canadian Medical Association (CMA, Canada) 2017 ⊕

Lignes directrices canadiennes relatives à l'utilisation des opioïdes pour le traitement de la douleur chronique non cancéreuse, Canadian Medical Association. 2017:110P. [196698].

Recommandation 1: Lorsqu'on envisage le traitement d'un patient atteint de douleur chronique non cancéreuse nous recommandons l'optimisation de la pharmacothérapie non opioïde et du traitement non pharmacologique plutôt qu'un essai d'opioïdes (Recommandation Forte). Le tableau 2 énumère certains des traitements spécifiques disponibles pour la prise en charge de la douleur chronique non cancéreuse ainsi que les données probantes appuyant chacun de ces traitements . *Douleurs dorsales, ostéo-arthrite du genou, douleurs cervicales, fibromyalgie,* ***céphalées graves*** *ou migraines.* Qualité des données probantes : Faible ou très faible. Thérapies dont l'efficacité est appuyée par certaines données probantes : **acupuncture**, yoga, massothérapie, manipulation rachidienne, manipulation ostéopathique, tai-chi et approches de relaxation peuvent aider certains patients à gérer leur douleur.

3.18. Emblemhealth (insurance provider, USA) 2017 ⊕

Acupuncture — Medicare Dual-Eligible Members Emblemhealth. 2017. [111547].

Members with the Medicare Dual-Eligible benefit are eligible for acupuncture when performed by an individual licensed by New York State to perform acupuncture and when performed for the following diagnoses: 1. Adult postoperative nausea and vomiting 2. Chemotherapy related nausea and vomiting 3. Pregnancy related nausea and vomiting 4. Carpal tunnel syndrome 5. Epicondylitis (tennis elbow) 6. **Headache** 7. Low back pain 8. Menstrual pain 9. Myofascial pain 10. Osteoarthritis

3.19. Ministry of Public Health of Qatar (MOPH, Qatar) 2017 ⊕

Headache in adults. Clinical Guidelines for the State of Qatar. Ministry of Public Health of Qatar (MOPH). 2017. [221303]. URL

Tension Type Headache. Acupuncture − consider a course of up to 10 sessions over 5-8 weeks (Level 2, grade A2). *Migraine*. Acupuncture : A course of up to 10 sessions of acupuncture over 5-8 weeks (Level 2, grade A1).

3.20. Toward Optimized Practice, Institute of Health Economics (TOP, IHE, Canada) 2016 ⊕

Toward Optimized Practice. Primary Care Management of Headache in Adults. Edmonton (AB): Toward Optimized Practice. 2016. 76P. [168209].

Do : Acupuncture can be considered in the prophylactic treatment of patients with migraine. Treatment should consist of at least one to two sessions per week for several (2 or more) months, with each treatment lasting approximately 30 minutes (Systematic review).
Tension type-Headache (TTH): Acupuncture may be considered for patients with frequent tension-type headaches.

3.21. U.S. Navy Bureau of Medicine and Surgery (USA) 2013 ⊕

Acupuncture. U.S. Navy Bureau of Medicine and Surgery. 2013.17p. [180539].

Category A (fair to high quality evidence): Authorized and recommended for routine use. **Headache** .

3.22. Japanese Society of Neurology (JSN, Japan) 2013 ⊕

Clinical Practice Guideline for Chronic Headache 2013 Japanese Society of Neurology. 2013. 284p. [180926].

Despite advances in headache treatment, there remain many patients with chronic headache in whom pharmacotherapy alone is not adequately effective. For the treatment of refractory headache, a multidisciplinary team led by the headache specialist and supported by other health professionals including clinical psychotherapist, physical therapist, occupational therapist, nurse, pharmacist and **acupuncturist** is essential (grade A). Various types of tension-type headache exist, and the types that cause disability in daily living should be treated. Among them, frequent episodic tension-type headache and chronic tension-type headache require treatment. Therapies can be divided into acute treatment and prophylactic treatment, each of which can be pharmacotherapy and non-pharmacotherapy. For acute treatment, attention has to be paid to medication-overuse headache. For prophylactic therapy, occurrence of adverse effects should be monitored (grade A, C). Treatments for central mechanisms such as tricyclic antidepressants, stress management, relaxation training, and **acupuncture**; and therapies for peripheral mechanisms such as relaxation training and physical therapy have been investigated) (grade C recommendation).

3.23. Colorado Division of Workers' Compensation (USA) 2012 ⊕

Colorado Division of Workers' Compensation. Traumatic brain injury medical treatment guidelines. Denver (CO): Colorado Division of Workers' Compensation. 2012; :119P. [168082].

Widely accepted treatments for post-traumatic headache may include, but are not limited to: interdisciplinary treatment, pharmacology, joint manipulation, physical therapy, massage, acupuncture, biofeedback, psychotherapy (i.e., cognitive behavioral therapy), and diet.
There is strong evidence that acupuncture and sham acupuncture are prophylactic for migraines. There is good evidence that acupuncture has similar results as medication prophylaxis. There is some evidence that sham acupuncture is better than no treatment for migraine prophylaxis. These procedures should only be continued if functional gains are documented. Acupuncture, biofeedback, and cervical spinal manipulations are widely accepted and may be used for headaches or other painful conditions

3.24. Croatian Society for Neurovascular Disorders, Croatian Medical Association (Croatia) 2012 ⊕

Vuković Cvetković V, Kes VB, Serić V, Solter VV, Demarin V, Janculjak D, Petravić D, Lakusić DM, Hajnsek S, Lusić I, Bielen I, Basić S, Sporis D, Soldo SB, Antoncić I; Croatian Society for Neurovascular Disorders, Croatian Medical Association. Report of the Croatian Society for Neurovascular Disorders, Croatian Medical Association. Evidence based guidelines for treatment of primary headaches–2012 update. Acta Clin Croat. 2012;51(3):323-78. [222897]. URL

Migraine: a Cochrane review on its use in migraine concludes that acupuncture is effective and should be considered as a prophylactic measure for patients with frequent or insufficiently controlled migraine attacks.
Migraine and pregnancy: Among nonpharmacological migraine prophylaxis, only relaxation techniques, biofeedback in particular, and acupuncture have accumulated sufficient evidence in support of their efficacy and safety.
Tension type headache: Physical therapy and acupuncture may be valuable options for patients with frequent TTH , but there is no scientific evidence for efficacy. Cochrane review on the use of acupuncture in TTH concludes that it could be a valuable nonpharmacological tool in patients with frequent episodic or chronic TTH.

3.25. Danish Headache Society (DHS, Danemark) 2012 Ø

Bendtsen L, Birk S, Kasch H, Aegidius K, Sørensen PS, Thomsen LL, Poulsen L, Rasmussen MJ, Kruuse C, Jensen R. Reference programme: diagnosis and treatment of headache disorders and facial pain (2nd Edition). J Headache Pain. 2012;13(suppl 1):1-29. [202379].

Migraine with and without aura: Controlled trials of the effect of acupuncture have yielded diverging results. *Tension-type headache*: Acupuncture is a frequently used measure. Controlled trials of the effect of acupuncture on tension-type headache have yielded diverging results. *Trigeminal neuralgia*: A limited number of patients report effect from acupuncture, but there is no scientific evidence to support an effect of such or other non-pharmacological treatment.

3.26. National Institute for Health and Clinical Excellence (NICE, UK) 2012 ⊕

Headaches in over 12s: diagnosis and management (CG150). Evidence-based recommendations on diagnosing and managing headaches in adults and young people aged 12 years and over. London (UK): National Institute for Health and Clinical Excellence (NICE). 2012.360P. [158980].

Prophylactic treatment 1.3.9 : Consider a course of up to 10 sessions of acupuncture over 5–8 weeks for the prophylactic treatment of chronic tension-type headache. [2012].

3.27. Società Italiana per lo Studio delle Cefalee (SISC, Italia) 2012 ⊕

Sarchielli P, Granella F, Prudenzano MP, Pini LA, Guidetti V, Bono G, Pinessi L, Alessandri M, Antonaci F, Fanciullacci M, Ferrari A, Guazzelli M, Nappi G, Sances G, Sandrini G, Savi L, Tassorelli C, Zanchin G. Italian guidelines for primary headaches: 2012 revised version. J Headache Pain. 2012;13 Suppl 2:S31-70. [202377].

Acupuncture. *Migraine.* Preventive treatment: level of evidence (A), level of reommandation (II). Symptomatic treatment: level of evidence (-) Level of recommendation (IV)
Tension type headache : Level of evidence (A) Level of recommendation (II)

3.28. Toward Optimized Practice, Institute of Health Economics (TOP, IHE, Canada) 2012 ⊕

Toward Optimized Practice. Guideline for primary care management of headache in adults. Edmonton (AB): Toward Optimized Practice. 2012. 71P. [155937]

Do : Acupuncture can be considered in the prophylactic treatment of patients with migraine. Treatment should consist of at least one to two sessions per week for several (2 or more) months, with each treatment lasting approximately 30 minutes (Systematic review).
Tension type-Headache (TTH): Physical therapy and acupuncture may be considered for patients with frequent TTH.

3.29. European Headache Federation (EHF) 2007 ⊕

European Headache Federation. European principles of management of common headache disorders in primary care J Headache Pain. 2007;8:S1-47. [169126].

Acupuncture benefits some people with migraine or tension-type headache although large clinical trials have failed to distinguish between acupuncture and sham procedures. It requires skilled and individualised therapy.

3.30. Agence Nationale d'accréditation et d'évaluation en Santé (ANAES, France) 2004 ⊕

CCQ (céphalées chroniques quotidiennes) : diagnostic, rôle de l'abus médicamenteux, prise en charge. Paris: Agence Nationale d'accréditation et d'évaluation en Santé. 2004. [131623].

À condition d'être couplées à un sevrage et à la mise en place d'un traitement de fond de la céphalée préexistante, d'autres techniques sont utilisées : neurostimulation acupuncturale (grade C) ; physiothérapie (grade C) ; acupuncture ; thérapies manuelles.