Table des matières

Infantile Colic

Coliques du nourrisson : évaluation de l'acupuncture

1. Systematic Reviews and Meta-Analysis

☆☆☆	Evidence for effectiveness and a specific effect of acupuncture
☆☆	Evidence for effectiveness of acupuncture
☆	Limited evidence for effectiveness of acupuncture
Ø	No evidence or insufficient evidence

1.1. Tanrıverdi 2023

Tanrıverdi DÇ, Karaahmet AY, Bilgiç FŞ. Colic and sleep outcomes of nonpharmacological intervention in infants with infantile colic: systematic review and metaanalysis. Rev Assoc Med Bras (1992). 2023 May 19;69(5):e20230071. https://doi.org/10.1590/1806-9282.20230071

Objective	The aim of this study was to systematically review the colic and sleep outcomes of nonpharmacological intervention in infants with infantile colic and perform a meta-analysis of the available evidence.
Methods	The literature review for this systematic review was conducted between December 2022 and January 2023 using five electronic databases, namely PubMed, CINAHL, Scopus, Web of Science, and ULAKBİM. Published articles were scanned using MeSH-based keywords. Only randomized controlled trials conducted in the past 5 years were included. The data were analyzed using the Review Manager computer program.
Results	This meta-analysis included three studies involving a total of 386 infantile colic infants. After nonpharmacological treatment, it was found that infants with infantile colic reduced crying time (standardized mean difference: 0.61; 95%CI 0.29-0.92; Z=3.79; p=0.00002), improved sleep duration (standardized mean difference: 0.22; 95%CI -0.04 to 0.48; Z=1.64; p=0.10), and decreased crying intensity (mean difference: -17.24; 95%CI -20.11 to 14.37; Z=11.77; p<0.000001).
Conclusion	According to the meta-analysis findings, it was determined that the risk of bias was low in the studies included and that nonpharmacological chiropractic, craniosacral, and **acupuncture** treatments applied to infantile colic infants in the three included studies reduced crying time and intensity and increased sleep duration.

Çetinkaya 2021

Çetinkaya B. Complementary and Alternative Therapies for Infantile Colic: A Systematic Review of the Literature. Altern Ther Health Med. 2021;27(2):42-47. [218502].

Background	Infantile colic is defined as paroxysms of uncontrollable and unexplained crying in the first three months of life. Complementary and alternative therapy methods are one of the methods used to treat infantile colic, which has negative effects on parents and infants.

Objective	The aim of this study was to evaluate the efficacy and safety of the complementary and alternative therapy methods used to treat infantile colic.
Methods	The PubMed, SCOPUS, Web of Science and Cochrane Library databases were searched for complementary therapies for infantile colic. Medical Subject Headings (MeSH) were used to determine the search terms. Combination of infantile colic and acupuncture therapy, musculoskeletal manipulations, massage, phytotherapy, aromatherapy were used as the search terms.
Results	A total of 13 interventions were found from Sweden, Norway, Russia, Italy, Turkey, Iran and Finland. **In two randomized and controlled trials, acupuncture therapy was found to be effective in the treatment of infantile colic. One study found it to be ineffective. No serious side effects were reported in these studies**. A variety of aromatic oils have been used by orally, by inhalation and topically to treat infantile colic and have been found to be effective with no serious side effects. Massage has also been found to effectively reduce the symptoms of infantile colic.
Conclusions	Further study of the complementary and alternative therapy methods will help to increase the evidence for their effective use in the treatment of infantile colic.

1.3. Lee 2018 Ø

Lee D, Lee H, Kim J, Kim T, Sung S, Leem J, Kim TH. Acupuncture for Infantile Colic: A Systematic Review of Randomised Controlled Trials. Evid Based Complement Alternat Med. 2018. [189164].

Introduction	Infantile colic is a common condition causing considerable deterioration in the quality of life of both infants and their parents. Minimal acupuncture, a gentle needling technique without strong muscle stimulation, has primarily been used to treat this condition, but the clinical evidence of its efficacy and safety is yet to be established.
Objectives	The objective of this review was to assess clinical evidence of the safety and efficacy of acupuncture for infantile colic.
Methods	To identify studies for inclusion, PubMed, Cochrane Library, Google Scholar, China Knowledge Resource Integrated Database, Wanfang, and Oriental Medicine Advanced Searching Integrated System were searched until January 2017. Only randomised controlled trials of infantile colic in patients aged 0 to 25 weeks, who were treated with acupuncture, were included. To assess the quality, the risk of bias was determined for each study by two authors. The intention was to perform a meta-analysis, but this was not possible in this study due to considerable clinical heterogeneity among the included studies.
Results	identified, only **four randomized controlled trials** were included in this review. All included studies were conducted in northern European countries. Most studies showed a low risk of bias in most domains. Minimal acupuncture on LI4 or ST36 without strong stimulation was used in all studies. From the narrative analysis, acupuncture appears to be effective in alleviating the symptoms of colic, including crying and feeding and stooling problems, and may have only minor adverse effects. However, clinical evidence could not be confirmed owing to considerable clinical heterogeneity and the small sample sizes of the included studies.
Conclusion	There is currently no conclusive evidence on the safety and efficacy of acupuncture for infantile colic. Rigorous full-scale randomized controlled trials will be necessary in future.

1.4. Skjeie 2018 Ø

Skjeie H, Skonnord T, Brekke M, Klovning A, Fetveit A, Landgren K, Hallström IK, Brurberg KG. Acupuncture treatments for infantile colic: a systematic review and individual patient data meta-

analysis of blinding test validated randomised controlled trials. Scand J Prim Health Care. 2018;36(1):56-69. [168069].

Objective	Needle acupuncture in small children has gained some acceptance in Western medicine. It is controversial, as infants and toddlers are unable to consent to treatment. We aimed to assess its efficacy for treating infantile colic.
Design	A systematic review and a blinding-test validation based on individual patient data from randomised controlled trials. Primary end-points were crying time at mid-treatment, at the end of treatment and at a 1-month follow-up. A 30-min mean difference (MD) in crying time between acupuncture and control was predefined as a clinically important difference. Pearson's chi-squared test and the James and Bang indices were used to test the success of blinding of the outcome assessors [parents]. Eligibility criteria and data sources: We included randomised controlled trials of acupuncture treatments of infantile colic. Systematic searches were conducted in Cochrane CENTRAL, MEDLINE, EMBASE, CINAHL and AMED, and in the Chinese language databases CNKI, VIP, Wang fang, SinoMed and Chinese Clinical Trial Registry.
Results	We included **three randomised controlled trials with data from 307 participants**. Only one of the included trials obtained a successful blinding of the outcome assessors in both the acupuncture and control groups. The MD in crying time between acupuncture intervention and no acupuncture control was -24.9 min [95% confidence interval, CI -46.2 to -3.6; three trials] at mid-treatment, -11.4 min [95% CI -31.8 to 9.0; three trials] at the end of treatment and -11.8 min [95% CI -62.9 to 39.2; one trial] at the 4-week follow-up. The corresponding standardised mean differences [SMDs] were -0.23 [95% CI -0.42 to -0.06], -0.10 [95% CI -0.29 to 0.08] and -0.09 [95% CI -0.48 to 0.30]. The heterogeneity was negligible in all analyses. The statistically significant result at mid-treatment was lost when excluding the apparently unblinded study in a sensitivity analysis: MD -13.8 min [95%CI -37.5 to 9.9] and SMD -0.13 [95%CI -0.35 to 0.09]. The registration of crying during treatment suggested more crying during acupuncture [odds ratio 7.7; 95% CI 2.7-20.6; one trial]. GRADE-Moderate quality evidence.
Conclusions	Percutaneous needle acupuncture treatments should not be recommended for infantile colic on a general basis. Systematic review registration: PROSPERO 2015:CRD42015023253 Key points The role of acupuncture in the treatment of infantile colic is controversial. Available trials are small and present conflicting results. There were no clinically important differences between infants receiving acupuncture and no acupuncture control in this IPD meta-analysis of randomised controlled trials. The data indicate that acupuncture induces some treatment pain in many of the children. The study results indicate that percutaneous needle acupuncture should not be recommended for treatment of infantile colic on a general basis.

1.5. Bruyas-Bertholon 2012 Ø

Bruyas-Bertholon V, Lachaux A, Dubois JP, Fourneret P, Letrilliart L. Quels traitements pour les coliques du nourrisson ? Presse Med. 2012;41(7-8). [166077].

Contexte	Les coliques ou pleurs excessifs du nourrisson représentent une source de stress pour les parents et un motif fréquent de consultation en soins primaires.
Objectif	Évaluer l’efficacité des traitements de ce syndrome à partir d’une revue systématique de la littérature internationale.
Methodes	Sources documentaires Banques de données Medline, Cochrane et Embase. Sélection des études Les critères d’inclusion étaient les suivants : évaluation thérapeutique des coliques ou pleurs excessifs du nourrisson, essais contrôlés randomisés ou méta-analyses, publiés en langue anglaise ou française. Trente et un essais contrôlés randomisés et une méta-analyse ont été inclus.

Résultats	Les médicaments allopathiques se révèlent sans efficacité démontrée (siméticone, lactase) ou, pour certains, responsables d'effets secondaires potentiellement graves (dicyclomine). Les préparations pour nourrissons à base d'hydrolysat de caséine ou de lait de soja apparaissent efficaces, mais le lait de soja peut induire des allergies. Les solutions sucrées apportent un bénéfice dans des études de faible niveau de preuve. L'efficacité d'un probiotique (Lactobacillus reuteri) et d'une phytothérapie à base de fenouil est vraisemblable. **Pour les thérapies manuelles (ostéopathie, acupuncture)** et comportementales (réduction des stimulations, réassurance des parents), **les preuves sont insuffisantes.** Limites du travail: la définition utilisée pour les coliques du nourrisson et les modalités de mesure des pleurs différaient selon les essais. La qualité méthodologique des essais inclus était variable, avec notamment une procédure de double insu absente dans 17 essais.
Conclusion	Les traitements les mieux validés des coliques du nourrisson sont la substitution du lait de vache par un lait hydrolysé, l'utilisation du L. reuteri et des extraits de fenouil.

2. Overviews of Systematic Reviews

2.1. Perry 2019 Ø

Perry R , Leach V , Penfold C , Davies P. An overview of systematic reviews of complementary and alternative therapies for infantile colic. Syst Rev. 2019;8(1):271. [142736].

Background	Infantile colic is a distressing condition characterised by excessive crying in the first few months of life. The aim of this research was to update the synthesis of evidence of complementary and alternative medicine (CAM) research literature on infantile colic and establish what evidence is currently available.
Methods	Medline, Embase and AMED (via Ovid), Web of Science and Central via Cochrane library were searched from their inception to September 2018. Google Scholar and OpenGrey were searched for grey literature and PROSPERO for ongoing reviews. Published systematic reviews that included randomised controlled trials (RCTs) of infants aged up to 1 year, diagnosed with infantile colic using standard diagnostic criteria, were eligible. Reviews of RCTs that assessed the effectiveness of any individual CAM therapy were included. Three reviewers were involved in data extraction and quality assessment using the AMSTAR-2 scale and risk of bias using the ROBIS tool.
Results	Sixteen systematic reviews were identified. Probiotics, fennel extract and spinal manipulation show promise to alleviate symptoms of colic, although some concerns remain. **Acupuncture and soy are currently not recommended**. The majority of the reviews were assessed as having high or unclear risk of bias and low confidence in the findings.
Conclusion	There is clearly a need for larger and more methodologically sound RCTs to be conducted on the effectiveness of some CAM therapies for IC. Particular focus on probiotics in non-breastfed infants is pertinent.

3. Clinical Practice Guidelines

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

3.1. Duodecim EBM Guidelines (Finland) 2021 Ø

Version française (EBMFrance.net). Pleurs du nourrisson. Duodecim 2021.

https://www.ebmfrance.net/fr/Pages/ebm/ebm00993.aspx

Prendre le nourrisson plus souvent dans les bras, les massages bébés ou autres méthodes de traitement alternatif telles que le traitement par **acupuncture** ou chiropraxie ne se sont pas avérées efficaces dans le traitement des pleurs dus aux coliques.

3.2. American Academy of Family Physicians (AAFP, USA) 2015 Ø

Johnson JD, Cocker K, Chang E. Infantile colic: recognition and treatment. Am Fam Physician. 2015;92(7):577-82. [184259].

Evidence does not support chiropractic or osteopathic manipulation, infant massage, swaddling, **acupuncture**, or herbal supplements.