Table des matières

Sickle cell disease

Drépanocytose : évaluation de l'acupuncture

1. Systematic Reviews and Meta-Analysis

1.1. Alsabri 2023

Alsabri M, Carfagnini C, Amin M, Castilo F, Lewis J, Ashkar M, Hamzah M, Mohamed N, Saker M, Mahgerefteh J, St Victor R, Peichev M, Kupferman F, Viswanathan K. Complementary and alternative medicine for children with sickle cell disease: A systematic review. Blood Rev. 2023 May;59:101052. https://doi.org/10.1016/j.blre.2023.101052

Background	Complementary and alternative medicine (CAM) is a popular alternative to opioid and other analgesics in sickle cell disease (SCD). We review the effectiveness, prevalence, and factors associated with CAM use in the pediatric SCD population.
Methods	The review protocol was created based on Preferred Reporting Items for Systematic Reviews and Meta-Analyses guidelines. A literature search was conducted in MEDLINE, Embase, Cochrane Library, PubMed, and Web of Science.
Results	Twenty-four studies were examined. The prevalence of CAM use in pediatric patients with SCD ranged from 36 to 84.5%. Common inpatient CAM interventions were yoga, virtual reality, and **acupuncture**, which decreased pain scale scores. Outpatient CAMs were consisted of cognitive behavioral therapy, massage therapy, and guided-imagery, which increased pain tolerability and decreased pain scale scores.
Conclusions	CAM modalities can decrease pain scale scores. However, the impact of specific CAM modalities on emergency department visits, hospitalizations, and school absences were inconclusive.

1.2. Meremikwu 2011 Ø

Meremikwu MM, Okomo U. Sickle cell disease. BMJ Clin Evid. 2011;2402.[187057].

Introduction	Sickle cell disease causes chronic haemolytic anaemia, dactylitis, and painful acute crises. It also increases the risk of stroke, organ damage, bacterial infections, and complications of blood transfusion. In sub-Saharan Africa, up to a third of adults are carriers of the defective sickle cell gene, and 1% to 2% of babies are born with the disease.
Methods and outcomes	We conducted a systematic review and aimed to answer the following clinical questions: what are the effects of pharmaceutical and non-pharmaceutical interventions to prevent sickle cell crisis and other acute complications in people with sickle cell disease? What are the effects of pharmaceutical and non-pharmaceutical interventions to treat pain in people with sickle cell crisis? We searched: Medline, Embase, The Cochrane Library, and other important databases up to March 2010 (Clinical Evidence reviews are updated periodically; please check our website for the most up-to-date version of this review). We included harms alerts from relevant organisations such as the US Food and Drug Administration (FDA) and the UK Medicines and Healthcare products Regulatory Agency (MHRA).

Results	We found 38 systematic reviews, RCTs, or observational studies that met our inclusion criteria. We performed a GRADE evaluation of the quality of evidence for interventions.
Conclusions	In this systematic review we present information relating to the effectiveness and safety of the following interventions: **acupuncture**, antibiotic prophylaxis in children <5 years of age, antibiotic prophylaxis in children >5 years of age, aspirin, avoidance of cold environment, blood transfusion, codeine, corticosteroid (with narcotic analgesics), diflunisal, hydration, hydroxyurea, ibuprofen, ketorolac, limiting physical exercise, malaria chemoprophylaxis, morphine (controlled-release oral after initial intravenous bolus, repeated intravenous doses), oxygen, paracetamol, patient-controlled analgesia, pneumococcal vaccines, and rehydration

1.3. Meremikwu 2009 Ø

Meremikwu MM. Sickle cell disease. Clin Evid (Online). 2009;mar 27:2402. [153029].

Background	Sickle cell disease causes chronic haemolytic anaemia, dactylitis, and painful acute crises, and increases the risk of stroke, organ damage, bacterial infections, and complications of blood transfusion. In sub-Saharan Africa, up to a third of adults are carriers of the defective sickle cell gene, and 1-2% of babies are born with the disease.
Methods and outcomes	We conducted a systematic review and aimed to answer the following clinical questions: What are the effects of pharmaceutical and non-pharmaceutical interventions to prevent sickle cell crisis and other acute complications in people with sickle cell disease? What are the effects of pharmaceutical and non-pharmaceutical interventions to treat pain in people with sickle cell crisis? We searched: Medline, Embase, The Cochrane Library, and other important databases up to September 2007 (Clinical Evidence reviews are updated periodically; please check our website for the most up-to-date version of this review). We included harms alerts from relevant organisations such as the US Food and Drug Administration (FDA) and the UK Medicines and Healthcare products Regulatory Agency (MHRA).
Results	We found 38 systematic reviews, RCTs, or observational studies that met our inclusion criteria. We performed a GRADE evaluation of the quality of evidence for interventions.
Conclusions	In this systematic review we present information relating to the effectiveness and safety of the following interventions: **acupuncture**, antibiotic prophylaxis in children under 5 years of age, aspirin, avoidance of cold environment, blood transfusion, codeine, corticosteroid (with narcotic analgesics), diflunisal, hydration, hydroxyurea, ibuprofen, ketorolac, limiting physical exercise, malaria chemoprophylaxis, morphine (controlled-release oral after initial intravenous bolus, repeated intravenous doses), oxygen, paracetamol, patient-controlled analgesia, penicillin prophylaxis in children over 5 years of age, piracetam, pneumococcal vaccines, rehydration, and zinc sulphate.

2. Clinical Practice Guidelines

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

2.1. American Society of Hematology (ASH, USA) 2021 ⊕

2019-2021 ASH Clinical Practice Guidelines on Sickle Cell Disease (SCD): What You Should Know.

American Society of Hematology (ASH). 2021. [219455].
https://www.hematology.org/-/media/hematology/images/clinicians/guidelines/ashnew2021ashclinicalpracticeguidelinesonscd92721.pdf?la=en&hash=B1E96167DBDC5182FA032D5D6D911B5B

Clinicians treating individuals living with SCD and chronic pain can consider Cognitive Behavioral Therapy and other integrative approaches (e.g., **acupuncture**, massage therapy) in addition to medications as part of a comprehensive disease and pain management plan.