

Adams D, Sikora S, Spelliscy C, Cheng F, Vohra S.

The safety of pediatric acupuncture: a systematic review.

Denise Adams, University of Alberta, 1047 RTF Building, University of Alberta, Edmonton, AB, T6G 2E1, Canada.

denise.adams@ualberta.ca

Background: The popularity of acupuncture is growing among children. Despite its prevalence, the safety of pediatric acupuncture has yet to be described. We conducted a systematic review to assess the nature and severity of adverse events associated with pediatric acupuncture.

Objective: To identify adverse events associated with needle acupuncture in children.

Methods: We systematically searched 17 databases (including MEDLINE, EMBASE, AMED, CINAHL, Cochrane Database of Systematic Reviews, Cochrane Central Registry of Controlled Trials, PsycInfo, HealthStar, Alternative Health Watch, Web of Science, Acubriefs, CAMPAIN, Index to Chiropractic Literature and Scopus) from inception to June 2007, irrespective of language. Inclusion criteria were: (1) primary, peer-reviewed investigation; (2) involved needle acupuncture; (3) affected individuals from birth to 18 years of age; and (4) reported adverse events related to acupuncture. One reviewer screened all articles, while the second reviewed all excluded articles to ensure that no article was inappropriately excluded. Full articles of potentially relevant references were retrieved and assessed by two independent reviewers. Safety data was extracted from all included studies.

Results: Seven thousand, two hundred sixty-two potentially relevant articles were identified. Of these 210 were retrieved and assessed for inclusion. To date 22 studies have been included and the data extracted. Eleven of these studies included adults as the majority of patients; for these studies the age of the patient experiencing the adverse event was never reported. Most of the adverse events that have been identified in children were mild and included pain, bruising, and worsening of symptoms. The few adverse events rated as moderate or serious included one pneumothorax, 2 infections, and 2 cases of complications from needles left in the body.

Conclusions: Few adverse events associated with acupuncture have been reported in children and the majority of those were mild in severity. These findings are relevant to children and families, healthcare providers, policy makers, regulatory agencies and educational bodies to promote evidence-based care and minimize preventable harms.