Alternative therapies for nausea and vomiting of pregnancy

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Authors' objectives
To review the effectiveness of alternative therapies for nausea and vomiting during pregnancy.

Searching
The following databases were searched in 1996 using a variety of complementary and alternative medicine search terms, which were listed in a table in the review: MEDLINE, AcuBase, AGRICOLA, Biosis Previews, CATS, AMED, CANCERLINE, CINAHL, CISCOM, EMBASE, Wilson General Science, Psychological Abstracts, PsycINFO, and the Social Sciences Citation Index. The keywords used in the search were 'pregnancy' and 'pregnancy complications'. The MEDLINE search was updated in 1997.

Further publications and reports of potential adverse effects were identified by examining review articles, letters and the bibliographies of retrieved studies. The search was not limited to clinical trials or English language publications, although only English language papers or abstracts were read.

Study selection
Study designs of evaluations included in the review
The studies included in the review were clinical trials, observational studies, or case reports or series, which discussed nausea and vomiting during early pregnancy as the treatment condition and involved an intervention or therapy, other than Western biomedical pharmacology or standard advice about diet or lifestyle changes.

Specific interventions included in the review
Acupressure (manual, wristbands, electric current stimulation), ginger (250 mg, 4 times daily), pyridoxine (vitamin B6; individual doses of 2.6, 25 and 30 mg), hypnosis, behaviour modification and placebo.

Participants included in the review
Women in the first trimester of pregnancy were included.

Outcomes assessed in the review
The reduction of nausea and/or vomiting in pregnancy, measured in one study by use of a visual acuity scale.

How were decisions on the relevance of primary studies made?
The author does not state how the papers were selected for the review, or how many of the reviewers performed the selection. An a priori decision was made to exclude papers that represented pooled data if the original studies were published in English and had been retrieved in the literature search.

Assessment of study quality
The authors do not state that they assessed quality.

Data extraction
The author does not state how the data were extracted for the review, or how many of the reviewers performed the data extraction.

Methods of synthesis
How were the studies combined?
The included studies were discussed in a narrative review, and were reviewed for data relating to the primary outcomes,
i.e. the reduction of nausea and vomiting in early pregnancy.

How were differences between studies investigated?
The author does not state how differences between the studies were investigated.

Results of the review
Ten studies met the inclusion criteria: 7 RCTs evaluated acupressure (686 participants), 1 double-blind RCT evaluated the use of ginger (27 participants), and 2 double-blind RCTs evaluated the use of pyridoxine (401 participants). Additional studies were mentioned but their data were not included in the review.

Evidence of beneficial effects was found for the interventions of acupressure, ginger and pyridoxine, although the data on acupressure were equivocal.

Insufficient evidence was found for the benefits of hypnosis.

Authors' conclusions
There is insufficient research to support or to refute the efficacy of a number of common remedies for nausea and vomiting in pregnancy. The best-studied alternative remedy is acupressure, which may afford relief to many women; ginger and pyridoxine may also be beneficial.

CRD commentary
The author conducted a very thorough narrative review of the literature and addressed issues of bias by searching for unpublished data and non-English abstracts and articles, although any non-English material found was not read.

The inclusion criteria for the individual trials and their participants were stated. However, the author did not state whether the quality of the primary trials was assessed or how judgements were made about the inclusion of studies.

The author listed the primary trials on acupressure in tabular format but only discussed the data from the studies on ginger, pyridoxine and hypnosis in the text. The criteria and methods for the data extraction were not stated.

There were several cases of missing data from the primary studies of ginger, pyridoxine and hypnosis, e.g. dosages, the numbers of participants and reported results. The accuracy of the author's conclusions are difficult to assess since the results of the trials within each grouping were not presented or discussed in an explicit pooled format.

In the discussion of the acupressure trials the author's conclusions were supported by the data.

Implications of the review for practice and research
Practice: The author does not state any implications for practice.

Research: The author states that given the prevalence of the problem and the potential for adverse effects from the use of teratogenic or abortifacient remedies, more research in this field is needed.

Homeopathy was not addressed in this review, but with the prevalence of self-treatment with homeopathic remedies, this would also be an area for further research.

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This is a critical abstract of a systematic review that meets the criteria for inclusion on DARE. Each critical abstract contains a brief summary of the review methods, results and conclusions followed by a detailed critical assessment on the reliability of the review and the conclusions drawn.