

Impact of whole systems traditional Chinese medicine on in vitro fertilization outcomes.

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Author information

Abstract

Patients undergoing IVF may receive either acupuncture or whole-systems traditional Chinese medicine (WS-TCM) as an adjuvant IVF treatment. WS-TCM is a complex intervention that can include acupuncture, Chinese herbal medicine, dietary, lifestyle recommendations. In this retrospective cohort study, 1231 IVF patient records were reviewed to assess the effect of adjuvant WS-TCM on IVF outcomes compared among three groups: IVF with no additional treatment; IVF and elective acupuncture on day of embryo transfer; or IVF and elective WS-TCM. The primary outcome was live birth. Of 1069 non-donor cycles, WS-TCM was associated with greater odds of live birth compared with IVF alone (adjusted odds ratio [AOR] 2.09; 95% confidence interval [CI] 1.36 to 3.21), or embryo transfer with acupuncture only (AOR 1.62; 95% CI 1.04 to 2.52). Of 162 donor cycles, WS-TCM was associated with increased live births compared with all groups (odds Ratio [OR] 3.72; 95% CI 1.05 to 13.24, unadjusted) or embryo transfer with acupuncture only (OR 4.09; 95% CI: 1.02 to 16.38, unadjusted). Overall, IVF with adjuvant WS-TCM was associated with greater odds of live birth in donor and non-donor cycles. These results should be taken cautiously as more rigorous research is needed. Copyright © 2015 Reproductive Healthcare Ltd. Published by Elsevier Ltd. All rights reserved.

KEYWORDS:

Chinese herbal medicine; acupuncture; embryo transfer; in-vitro fertilization; live births; traditional Chinese medicine

Effects of acupuncture on rates of pregnancy and live birth among women undergoing in vitro fertilisation: systematic review and meta-analysis.

Manheimer E¹, Zhang G, Udoff L, Haramati A, Langenberg P, Berman BM, Bouter LM.

Author information

Abstract

OBJECTIVE:

To evaluate whether acupuncture improves rates of pregnancy and live birth when used as an adjuvant treatment to embryo transfer in women undergoing in vitro fertilisation.

DESIGN:

Systematic review and meta-analysis.

DATA SOURCES:

Medline, Cochrane Central, Embase, Chinese Biomedical Database, hand searched abstracts, and reference lists. Review methods Eligible studies were randomised controlled trials that compared needle acupuncture administered within one day of embryo transfer with sham acupuncture or no adjuvant treatment, with reported outcomes of at least one of clinical pregnancy, ongoing pregnancy, or live birth. Two reviewers independently agreed on eligibility; assessed methodological quality; and extracted outcome data. For all trials, investigators contributed additional data not included in the original publication (such as live births). Meta-analyses included all randomised patients.

DATA SYNTHESIS:

Seven trials with 1366 women undergoing in vitro fertilisation were included in the meta-analyses. There was little clinical heterogeneity. Trials with sham acupuncture and no adjuvant treatment as controls were pooled for the primary analysis. Complementing the embryo transfer process with acupuncture was associated with significant and clinically relevant improvements in clinical pregnancy (odds ratio 1.65, 95% confidence interval 1.27 to 2.14; number needed to treat (NNT) 10 (7 to 17); seven trials), ongoing pregnancy (1.87, 1.40 to 2.49; NNT 9 (6 to 15); five trials), and live birth (1.91, 1.39 to 2.64; NNT 9 (6 to 17); four trials). Because we were unable to obtain outcome data on live births for three of the included trials, the pooled odds ratio for clinical pregnancy more accurately represents the true combined effect from these trials rather than the odds ratio for live birth. The results were robust to sensitivity analyses on study validity variables. A prespecified subgroup analysis restricted to the three trials with the higher rates of clinical pregnancy in the control group, however, suggested a smaller non-significant benefit of acupuncture (odds ratio 1.24, 0.86 to 1.77).

CONCLUSIONS:

Current preliminary evidence suggests that acupuncture given with embryo transfer improves rates of pregnancy and live birth among women undergoing in vitro fertilisation.

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Acupuncture and women's health: an overview of the role of acupuncture and its clinical management in women's reproductive health.

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Abstract

BACKGROUND:

Acupuncture and other modalities of Chinese/East Asian medicine have been used to treat women's health for many centuries. Gynecology specialties focus particularly on menstrual and reproductive disorders. Both the adoption of the use of acupuncture outside Asia, and the incorporation of scientific analysis in Asia have challenged biomedical conceptions of what can be achieved with this treatment

method. The scale of research activity in relation to acupuncture and women's health has increased over the last 20 years.

OBJECTIVE:

This review aims to explore the research evidence in relation to acupuncture use for women's reproductive disorders, focusing on both clinical findings and experimental research on acupuncture's mechanisms of action in relation to women's health.

METHODS:

A narrative literature search was undertaken using searches of electronic databases and manual searches of journals and textbooks. The search included all literature published prior to June 2013. The literature was assessed as to the nature of the study it was reporting and findings synthesized into a commentary.

RESULTS:

For acupuncture's mechanism of action the search resulted in 114 relevant documents; in relation to clinical reports on the use of acupuncture for women's health 204 documents were found and assessed.

CONCLUSION:

There is preliminary data indicating acupuncture may improve menstrual health and coping for women experiencing delays falling pregnant. There is experimental data showing that acupuncture can influence female reproductive functioning, although the actual mechanisms involved are not yet clarified. Further well-conducted clinical research would benefit our understanding of the usefulness of acupuncture to women's health.

KEYWORDS:

Chinese medicine; acupuncture; alternative medicine; health; reproductive disorders; women

Acupunct Med. 2013 Jun;31(2):157-61. doi: 10.1136/acupmed-2012-010269. Epub 2013 Mar 19.

Influence of acupuncture on the outcomes of in vitro fertilisation when embryo implantation has failed: a prospective randomised controlled clinical trial.

Villahermosa DI, Santos LG, Nogueira MB, Vilarino FL, Barbosa CP.

Author information

Abstract

OBJECTIVE:

To evaluate the effectiveness of acupuncture and moxibustion as an adjuvant treatment in women undergoing in vitro fertilisation (IVF) when embryo implantation has failed.

METHODS:

A prospective, randomised controlled clinical trial was conducted with 84 infertile patients who had had at least two unsuccessful attempts of IVF. The patients were randomised in three groups: control (n=28), sham (n=28) and acupuncture (n=28). The sample size was calculated by assuming a pregnancy rate of 10% when embryo implantation had failed. The pregnancy rates of the current IVF cycle were evaluated by measurement of blood β human chorionic gonadotrophin (β hCG) and

subsequent transvaginal ultrasound. Acupuncture was performed on the first and seventh day of ovulation induction, on the day before ovarian puncture and on the day after embryo transfer. In the acupuncture group, patients were treated with moxibustion at nine acupuncture points (BL18, BL22, BL23, BL52, CV3, CV4, CV5, CV7, GV4) and needling at 12 points. In the sham group needles were inserted in eight areas that did not correspond to known acupuncture points.

RESULTS:

The clinical pregnancy rate in the acupuncture group was significantly higher than that in the control and sham groups (35.7% vs 7.1% vs 10.7%; $p=0.0169$).

CONCLUSIONS:

In this study, acupuncture and moxibustion increased pregnancy rates when used as an adjuvant treatment in women undergoing IVF, when embryo implantation had failed.

Fertil Steril. 2008 Jul;90(1):1-13. doi: 10.1016/j.fertnstert.2008.02.094. Epub 2008 Apr 28.

The role of acupuncture in the management of subfertility.

Ng EH1, So WS, Gao J, Wong YY, Ho PC.

Author information

Abstract

OBJECTIVE:

To review systematically the use of acupuncture in the management of subfertility.

DESIGN:

A computer search was performed via several English and Chinese databases to identify journals relevant to the subject.

RESULT(S):

The positive effect of acupuncture in the treatment of subfertility may be related to the central sympathetic inhibition by the endorphin system, the change in uterine blood flow and motility, and stress reduction. Acupuncture may help restore ovulation in patients with polycystic ovary syndrome, although there are not enough randomized studies to validate this. There is also no sufficient evidence supporting the role of acupuncture in male subfertility, as most of the studies are uncontrolled case reports or case series in which the sample sizes were small. Despite these deficiencies, acupuncture can be considered as an effective alternative for pain relief during oocyte retrieval in patients who cannot tolerate side effects of conscious sedation. The pregnancy rate of IVF treatment is significantly increased, especially when acupuncture is administered on the day of embryo transfer.

CONCLUSION(S):

Although acupuncture has gained increasing popularity in the management of subfertility, its effectiveness has remained controversial.