

Recent Studies & New Research in Medical Literature

Acupuncture on the day of embryo transfer significantly improves the reproductive outcome in infertile women: a prospective, randomized trial.

Westergaard LG, Mao Q, Kroglund M, Sandrini S, Lenz S, Grinsted J. Fertil Steril. 2006 May;85(5):1341-6. Epub 2006 Apr 5
Fertility Clinic Trianglen, Hellerup, Denmark. l.g.westergaard@dadlnet.dk

OBJECTIVE: To evaluate the effect of acupuncture on reproductive outcome in patients treated with IVF/intracytoplasmic sperm injection (ICSI). One group of patients received acupuncture on the day of ET, another group on ET day and again 2 days later (i.e., closer to implantation day), and both groups were compared with a control group that did not receive acupuncture. **DESIGN:** Prospective, randomized trial. **SETTING:** Private fertility center. **PATIENT(S):** During the study period all patients receiving IVF or ICSI treatment were offered participation in the study. On the day of oocyte retrieval, patients were randomly allocated (with sealed envelopes) to receive acupuncture on the day of ET (ACU 1 group, n = 95), on that day and again 2 days later (ACU 2 group, n = 91), or no acupuncture (control group, n = 87). **INTERVENTION(S):** Acupuncture was performed immediately before and after ET (ACU 1 and 2 groups), with each session lasting 25 minutes; and one 25-minute session was performed 2 days later in the ACU 2 group. **MAIN OUTCOME MEASURE(S):** Clinical pregnancy and ongoing pregnancy rates in the three groups. **RESULT(S):** Clinical and ongoing pregnancy rates were significantly higher in the ACU 1 group as compared with controls (37 of 95 [39%] vs. 21 of 87 [26%] and 34 of 95 [36%] vs. 19 of 87 [22%]). The clinical and ongoing pregnancy rates in the ACU 2 group (36% and 26%) were higher than in controls, but the difference did not reach statistical difference. **CONCLUSION(S):** Acupuncture on the day of ET significantly improves the reproductive outcome of IVF/ICSI, compared with no acupuncture. Repeating acupuncture on ET day +2 provided no additional beneficial effect.

Influence of acupuncture on the pregnancy rate in patients who undergo assisted reproduction therapy.

Paulus WE, Zhang M, Strehler E, El-Danasouri I, Sterzik K.

Department of Reproductive Medicine, Christian-Lauritzen-Institut, Ulm, Germany.
paulus@reprotox.de

OBJECTIVE: To evaluate the effect of acupuncture on the pregnancy rate in assisted reproduction therapy (ART) by comparing a group of patients receiving acupuncture treatment shortly before and after embryo transfer with a control group receiving no acupuncture. **DESIGN:** Prospective randomized study. **SETTING:** Fertility center. **PATIENT(S):** After giving informed consent, 160 patients who were undergoing ART and who had good quality embryos were divided into the following two groups through random selection: embryo transfer with acupuncture (n = 80) and embryo transfer without acupuncture (n = 80). **INTERVENTION(S):** Acupuncture was performed in 80 patients

25 minutes before and after embryo transfer. In the control group, embryos were transferred without any supportive therapy. **MAIN OUTCOME MEASURE(S):** Clinical pregnancy was defined as the presence of a fetal sac during an ultrasound examination 6 weeks after embryo transfer. **RESULT(S):** **Clinical pregnancies were documented in 34 of 80 patients (42.5%) in the acupuncture group, whereas pregnancy rate was only 26.3% (21 out of 80 patients) in the control group.** **CONCLUSION(S):** **Acupuncture seems to be a useful tool for improving pregnancy rate after ART.**

Acupuncture prior to and at embryo transfer in an assisted conception unit-- a case series.

Johnson D.

Chobham Acupuncture Clinic, Chobham, Surrey. info@acupuncture-chobham.co.uk

Over a period of three years, acupuncture was offered to patients entering assisted reproduction therapy. Acupuncture sessions were given at varying, but usually weekly, intervals during the in vitro fertilisation (IVF) cycle, and immediately before and after embryo transfer. Twenty two patients (average age 36.2 years) were treated over a total of 26 IVF cycles and 15 pregnancies were achieved, as determined by presence of foetal heartbeat on ultrasound at four weeks post embryo transfer. This was a success rate of 57.7% compared with 45.3% for patients in the IVF unit not treated with acupuncture ($P > 0.05$). Relaxing effects were noted following acupuncture and it is speculated that this may have contributed to the increase in pregnancy rate for the acupuncture group.

[Altern Ther Health Med](#). 2007 May-Jun;13(3):38-48.  [Links](#)

In vitro fertilization and acupuncture: clinical efficacy and mechanistic basis.

Anderson BJ, Haimovici F, Ginsburg ES, Schust DJ, Wayne PM.

Pacific College of Oriental Medicine, New York, USA.

OBJECTIVE: To provide an overview of the use of acupuncture as an adjunct therapy for in vitro fertilization (IVF), including an evidence-based evaluation of its efficacy and safety and an examination of possible mechanisms of action. **DESIGN:** Literature review using PubMed, the Science Citation Index, The Cochrane Library (Database of Systematic Reviews and Central Register of Controlled Trials), the New England School of Acupuncture library databases, and a cross-referencing of published data, personal libraries, and Chinese medicine textbooks. **RESULTS:** Limited but supportive evidence from clinical trials and case series suggests that acupuncture may improve the success rate of IVF and the quality of life of patients undergoing IVF and that it is a safe adjunct therapy. However, this conclusion should be interpreted with caution because most studies reviewed had design limitations, and the acupuncture interventions employed

often were not consistent with traditional Chinese medical principles. The reviewed literature suggests 4 possible mechanisms by which acupuncture could improve the outcome of IVF: modulating neuroendocrinological factors; increasing blood flow to the uterus and ovaries; modulating cytokines; and reducing stress, anxiety, and depression. CONCLUSIONS: More high-quality randomized, controlled trials incorporating placebo acupuncture controls, authentic acupuncture interventions, and a range of outcome measures representative of both clinical outcom [Chin J Integr Med](#). 2006 Dec;12(4):312-6.

Progress of integrative Chinese and Western medicine in treating polycystic ovarian syndrome caused infertility.

Song JJ, Yan ME, Wu XK, Hou LH.

Gynecological and Obstetric Department, First Hospital, Heilongjiang University of Traditional Chinese Medicine, Harbin (150040).

Polycystic ovarian syndrome (PCOS) is one of the most popular diseases that cause menstrual dysfunction and infertility in women. The present paper is a brief retrospection on the progress in treatment of PCOS caused infertility with integrative Chinese and Western medicine (ICWM). It can be seen from these materials that using traditional Chinese medicine (TCM) recipes formulated by Shen-replenishing herbs or acupuncture to reinforce Gan-Shen, regulate Chong-Ren Channels in treating PCOS, stable clinical efficacy could be obtained, with less adverse reaction, though the effect initiated somewhat late. Whereas, when Shen-replenishing recipe and acupuncture are combined with hormone or ovulation promoting drugs of Western medicine, the above-mentioned shortcomings would be overcome. So, this combined therapy is frequently used in clinical practice.

Use of acupuncture in female infertility and a summary of recent acupuncture studies related to embryo transfer.

Stener-Victorin E, Humaidan P.

Institute of Neuroscience and Physiology, Sahlgrenska Academy, Göteborg University, Sweden. elisabet.stener-victorin@neuro.gu.se

During the last five years the use of acupuncture in female infertility as an adjuvant to conventional treatment in assisted reproductive technology (ART) has increased in popularity. The present paper briefly discusses clinical and experimental data on the effect of acupuncture on uterine and ovarian blood flow, as an analgesic method during ART, and on endocrine and metabolic disturbances such as polycystic ovary syndrome (PCOS). Further it gives a summary of recent studies evaluating the effect of acupuncture before and after embryo transfer on pregnancy outcome. Of the four published RCTs, three reveal significantly higher pregnancy rates in the acupuncture groups compared with the control groups. But the use of different study protocols makes it difficult to draw definitive conclusions. It seems, however, that acupuncture has a positive effect and no adverse effects on pregnancy outcome.

Comment in:

Fertil Steril. 2006 May;85(5):1362-3; discussion 1368-70.

Fertil Steril. 2006 May;85(5):1364-7; discussion 1368-70.

Fertil Steril. 2007 Apr;87(4):1000.

Acupuncture on the day of embryo transfer significantly improves the reproductive outcome in infertile women: a prospective, randomized trial.

Westergaard LG, Mao Q, Kroglund M, Sandrini S, Lenz S, Grinsted J.
Fertility Clinic Trianglen, Hellerup, Denmark. l.g.westergaard@dadlnet.dk

OBJECTIVE: To evaluate the effect of acupuncture on reproductive outcome in patients treated with IVF/intracytoplasmic sperm injection (ICSI). One group of patients received acupuncture on the day of ET, another group on ET day and again 2 days later (i.e., closer to implantation day), and both groups were compared with a control group that did not receive acupuncture. **DESIGN:** Prospective, randomized trial. **SETTING:** Private fertility center. **PATIENT(S):** During the study period all patients receiving IVF or ICSI treatment were offered participation in the study. On the day of oocyte retrieval, patients were randomly allocated (with sealed envelopes) to receive acupuncture on the day of ET (ACU 1 group, n = 95), on that day and again 2 days later (ACU 2 group, n = 91), or no acupuncture (control group, n = 87). **INTERVENTION(S):** Acupuncture was performed immediately before and after ET (ACU 1 and 2 groups), with each session lasting 25 minutes; and one 25-minute session was performed 2 days later in the ACU 2 group. **MAIN OUTCOME MEASURE(S):** Clinical pregnancy and ongoing pregnancy rates in the three groups. **RESULT(S):** Clinical and ongoing pregnancy rates were significantly higher in the ACU 1 group as compared with controls (37 of 95 [39%] vs. 21 of 87 [26%] and 34 of 95 [36%] vs. 19 of 87 [22%]). The clinical and ongoing pregnancy rates in the ACU 2 group (36% and 26%) were higher than in controls, but the difference did not reach statistical difference. **CONCLUSION(S):** Acupuncture on the day of ET significantly improves the reproductive outcome of IVF/ICSI, compared with no acupuncture. Repeating acupuncture on ET day +2 provided no additional beneficial effect.