## **Female Fertility Articles**

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

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**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. (Fertil Steril® 2002;77:721- 4. ©2002 by American Society for Reproductive Medicine.)

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Key Words: Acupuncture, assisted reproduction, embryo transfer, pregnancy rate

Acupuncture is an important element of traditional Chinese medicine (TCM), which can be traced back for at least 4,000 years. Acupuncture has been shown to alleviate nausea and vomiting, dental pain, addiction, headache, menstrual cramps, tennis elbow, fibromyalgia, myofascial pain, osteoarthritis, carpal tunnel syndrome, and asthma. Both physiologic and psychological benefits of acupuncture have been scientifically demonstrated in recent years.

However, so far there have been only a few serious trials concerning the use of acupuncture in reproductive medicine. Publications focus primarily on acupuncture therapy for male infertility (1, 2). Electroacupuncture may reduce blood flow impedance in the uterine arteries of infertile women (3). A positive impact of electroacupuncture on endocrinologic parameters and ovulation in women with polycystic ovary syndrome has been demonstrated (4). In addition, auricular acupuncture was successfully used in the treatment of female infertility (5). In the present study, we chose acupuncture points that relax the uterus according to the principles of TCM. Because acupuncture influences the autonomic nervous system, such treatment should optimize endometrial receptivity (6). Our main objective was to evaluate whether acupuncture accompanying embryo transfer increases clinical pregnancy rate.