

TABLE TWO: Acupuncture and IVF outcome: papers discussing embryo transfer excluded.

Female Studies

Author, date	Study Design	Outcome Measured	Control Group (n)	Acupuncture Method and timing (n)	Additional Information	Conclusion
Moy <i>et al</i> , 2010	Prospective, randomised, controlled. Double blind.	Pregnancy rates and clinical symptoms during acupuncture treatment.	ART patients receiving sham acupuncture .	ART patients receiving TCM acupuncture. (314)	ONLY ABSTRACT AVAILABLE. Sample numbers in each group unknown, 160 patients in total. All patients <38 years. Acupuncture timing unknown.	No significant difference in pregnancy rates. Patients receiving true acupuncture reported more negative experiences than sham counterparts.
So <i>et al</i> , 2010	Prospective, randomised, controlled. Double blind.	Pregnancy rates after frozen-thaw embryo transfer. A level and serum cortisol concentration.	IVF patients receiving placebo acupuncture using retracting needles (113).	IVF patients receiving one 25minute session of true acupuncture immediately after embryo transfer (113).	First study to investigate acupuncture when frozen-thawed embryos are used. Average age of all participants at freezing: 35 years. Age at transfer unknown.	No significance in any variable between true and placebo acupuncture groups. Placebo group had significantly higher pregnancy rate than patients declining acupuncture.
So <i>et al</i> , 2009	Prospective, randomised, controlled. Double blind.	Pregnancy rates, and endometrial/subendometrial vascularity, serum cortisol concentration and the anxiety level.	IVF patients receiving placebo acupuncture using retracting needles (185).	IVF patients receiving one 25minute session of true acupuncture immediately after embryo transfer (185).	Mean age of both groups: 36 years.	No significant differences were found in rates of ongoing pregnancy and live birth between the two groups, although overall pregnancy rate was significantly higher in <i>placebo</i> group. No significance difference on other variables, although all were reduced compared to baseline values.

Chen <i>et al</i> , 2009	Prospective, randomised. Non-blinded.	Oocyte quality and pregnancy outcome. Hormonal levels tested.	IVF patients receiving no acupuncture (30).	IVF patients receiving electro-acupuncture (30).	ONLY ABSTRACT AVAILABLE. Age of patients unknown, but stated in abstract that patients had poor ovarian reserve or response.	Serum oestradiol, fertilisation rate, oocyte maturation rate, good quality embryos rate, and implantation rate in the treated group were superior to control group. Trend to improved pregnancy and abortion rates, although not reaching significance.
Ho <i>et al</i> , 2009	Prospective, randomised. Non-blinded.	Clinical pregnancy and pulsatility index (PI) of right and left uterine arteries before and after EA were measured.	IVF patients receiving no acupuncture (14).	IVF patients receiving electro-acupuncture four times, twice a week for 2 weeks until day of oocyte collection (30).	Mean age of patients was 35.5 in acupuncture group, 34.0 in control group	The mean PI of both uterine arteries was significantly reduced after the two week EA protocol. No significance difference in pregnancy rates seen
Wang <i>et al</i> , 2007	Prospective.	Clinical pregnancy rate and live birth rate.	IVF patients receiving no acupuncture.	IVF patients receiving acupuncture twice weekly during the follicular phase and luteal phase but not on the day of embryo transfer (32).	ONLY ABSTRACT AVAILABLE. Sample number in control group unknown.	No significant difference on any variable.
Dieterle <i>et al</i> , 2006	Prospective, randomised, controlled. Single blinded.	Clinical and ongoing pregnancy rates.	IVF/ICSI patients receiving acupuncture at points designed not to evoke fertility. Same timing as case group (109).	IVF/ICSI patients receiving acupuncture for 30minutes immediately after embryo transfer and again 3 days later ie: during luteal phase (116).	All sessions performed by same practitioner. Mean age in control group: 35.1years, in case group: 34.7years.	Acupuncture significantly improved clinical and ongoing pregnancy rates.

Male Studies

Author, date	Study Design	Outcome Measured	Control Group (n)	Acupuncture Method and timing (n)	Additional Information	Conclusion
Zhang <i>et al</i> , 2002	Prospective.	Sperm concentration, motility, normal sperm ratio, ICSI fertilisation rate, good embryo rate.	No controls.	Male infertile patients receiving acupuncture twice a week for 8 weeks prior to ICSI.	ONLY ABSTRACT AVAILABLE. Age unknown. All participants had a history of one failed ICSI cycle.	Sperm motility, normal sperm ratio and fertilisation rate were improved after acupuncture compared to previous results. No impact on other variables.