

EVIDENCE-BASED MEDICINE CORNER

Acupuncture for Infertility: A recently released evidence

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Clearly the consultant gynecologist has never bothered to become acquainted with Chinese scientific literature this past 3 decades. Acupuncture has been used in China for centuries to regulate the female reproductive system.(1) Three potential mechanisms for its effects on fertility have been postulated.(2) Firstly, acupuncture may mediate the release of neurotransmitters,(3) which may in turn stimulate secretion of gonadotrophin releasing hormone, thereby influencing the menstrual cycle, ovulation, and fertility.(4) Secondly, acupuncture may stimulate blood flow to the uterus by inhibiting uterine central sympathetic nerve activity.(5) Thirdly, acupuncture may stimulate the production of endogenous opioids, which may inhibit the central nervous system outflow and the biological stress response.(6)

Recently, systematic review has been conducted to determine whether acupuncture given with embryo transfer improves live birth rates among women undergoing IVF. Seven trials with 1366 women undergoing in vitro fertilization were included in the meta-analyses. 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).

A possible explanation to these finding is that If acupuncture does work by modulating the balance of endogenous opioids , and it opens a gate to apply to fertility patients to improve outcomes by disinhibiting cAMP activity and, perhaps also reduce the sense of stress felt by so many of these couples by disinhibiting dopamine release.

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