



# Acupuncture has positive impact on the birth rate of sub fertile women undergoing IVF/ICSI, studies show.

# **Key Points**

- A recent high-level review found acupuncture to significantly improve birth rate.
- A summary of 11 reviews up to 2017 found acupuncture to significantly improve clinical pregnancy rate but scientific methods need to be improved.
- Experimental research should explore the impact of acupuncture on follicular development with the aim to improve embryo/blastocyst quality.
- Acupuncture is a suitable treatment option to help reduce stress and anxiety levels.

# What should you know?

A recent systematic review and meta-analysis (the highest level of research for evaluating the effects of a treatment) investigated the effects of acupuncture on sub fertile women during in vitro fertilisation (IVF) or intracytoplasmic sperm injection (ICSI).<sup>1</sup>

A total of 3,188 sub fertile women from 12 randomised controlled trials were included in this latest investigation.

#### What did the research find?

Acupuncture significantly improved the live birth rate of sub fertile patients undergoing IVF/ICSI.

# Why is this important?

In the UK, the overall birth rate following assisted reproduction is only 21% to 22% (fresh and frozen transfer). The birth rate varies with age and the type of transfer (see Table 1).

Table 1 UK birth rates per embryo transfer <sup>2</sup>		
Age Range	Fresh Cycle Transfer	Frozen Cycle Transfer
35 and under	29%	26%
35–37	23%	23%
38–39	15%	21%
40–42	10%	15%
43–44	7%	14%

Live birth rate can be considered the most important measure of success for sub fertile people undergoing assisted reproductive treatment.

Acupuncture has been shown to have a significant treatment effect on live birth rates, indicating that it may complement an IVF/ICSI cycle.

# What is different about this new systematic review and meta-analysis?

Researchers did not just focus on trials with a limited number of sessions around the time of egg collection or embryo transfer but also included those with more extensive acupuncture treatment.

#### What has other research indicated?

A recent overview of systematic reviews from 2009 up to 2017, found that acupuncture given at the time of egg collection/embryo transfer improved clinical pregnancy rates<sup>3</sup>.

The authors did not find a significant effect for live birth rates when acupuncture was administered around egg collection only or embryo transfer only. This evidence was graded as low quality, which means that the true effect of acupuncture administration could be substantially different from this overview's findings.

The inconclusiveness of the evidence-base in this overview reflects the inadequacy of the scientific methods applied so far to evaluate the effects of acupuncture. Future experimental recommendations included a focus on acupuncture to influence embryo quality via improvement of egg quality, rather than treating women only after fertilisation.

One very recent trial from Australia is not included in the reviews discussed above<sup>4</sup>. It was the largest randomised trial so far of acupuncture with IVF but technical issues make its conclusions hard to relate to routine clinical practice.

A 2018 trial from China looked specifically at having acupuncture just during the follicular phase of IVF/ICSI and found it improved ovarian blood supply and pregnancy rate<sup>5</sup>.

Overall, research on acupuncture alongside IVF/ICSI is by no means conclusive and is ongoing.

# Acupuncture improves emotional wellbeing during IVF

Assisted reproduction treatment can be stressful and interventions to support the psychological impact of subfertility and fertility treatment should be offered. Studies indicate that acupuncture treatment can reduce stress and/or anxiety and increase women's ability to cope with the IVF process<sup>6</sup>.

# When should I have acupuncture?

A comprehensive acupuncture treatment management strategy may be required leading up to an IVF/ICSI cycle (pre-treatment), and then during ovarian stimulation, with an aim to influence the development of ovarian follicles. In addition, treatment may also be provided around embryo transfer, and shortly afterwards during the two-week wait prior to a pregnancy test, to possibly influence implantation and relieve stress and anxiety resulting from uncertainty.

Research indicates that the effectiveness of acupuncture may be dose-dependent, i.e. you need to have a sufficient number of sessions over an adequate period of time.

# References

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