

Acupuncture and Fertility

Traditional Chinese medicine has a long history of treating women's health problems, with texts from 200 BC describing medicinal plants to treat infertility. Today Traditional Chinese medicine specialists have adapted and incorporated these traditional applications into modern fertility treatment. This has resulted in clinical feedback and research suggesting that acupuncture is capable of significantly enhancing fertility.

Traditional Chinese medicine aims through the use of acupuncture, herbs and lifestyle advice to achieve the following;

Regulate the woman's hormonal cycle

- A regular 28 to 30 day cycle with good quality fertile mucus, pain free ovulation midcycle, no premenstrual symptoms and a pain free period with efficient bleeding indicates a balanced hormonal cycle.

Improve the quality of a woman's fertile mucus

- Fertile mucus appears several days prior to ovulation and is required to help nourish the sperm and guide it to the egg.

Regulate ovulation

- An ovulation occurring on day 13 to 15 of a cycle indicates that the egg is being released at its optimal developmental time.

Promote an efficient menstrual bleed

- In traditional Chinese medicine the menstrual bleeding reflects the quality of the uterine lining. This lining appears important for implantation as women with poor endometrial development have an association with IVF failure or recurrent miscarriage. Chinese medicine aims to increase the thickness and quality of this lining, it does this through promoting corpus luteal function (which in turn produces progesterone) and through its documented action of increasing blood flow to the uterus (*Human Reproduction 11:1314-1317*)
- Ideally it is expected that a woman will experience menstrual bleeding for at least 3 to 5 days.

Enhance egg development.

- While the genetic material for a woman's eggs are created when the woman is herself an embryo, the process of the egg maturing comes under the influence of her hormones. Clinically it also appears possible to influence the integrity of the eggs released following acupuncture treatment, this may be due to increasing the blood supply to the developing follicles or by increasing the nutritional supply to the egg via the fluids that surround and nourish it.

Improve sperm quality

Normal sperm count values are currently given as

- greater than 20 million sperm per ml
- greater than 50% of sperm moving vigorously (motility)
- greater than 14 % with no deformities (morphology).

A population study looking at men's fertility found that those men that succeeded in fathering a child had

- greater than 48 million sperm per ml
 - a motility of more than 63%
 - a normal morphology of 12%
- (*New England Journal of Medicine* 345(19):1388-1393).

This study indicates the importance of men achieving the highest sperm count and motility possible.

Enhance the internal environment of the fallopian tubes.

- Traditional Chinese medicine aims to improve the elasticity and the secretions of the fallopian tubes, facilitating the passage of the fertilised egg into the uterus.

Promote embryo implantation

- A study where acupuncture was used during IVF at the time of embryo implantation resulted in a significantly higher viable pregnancy rate.
(*Fertility and Sterility* 74(4):721-72).
- In this study 160 women undergoing IVF were monitored. The success rate in the acupuncture group was 42.5% compared to a 26.3% success rate in the group of women that did not receive acupuncture.
- In a study of 114 women at the Reproductive Medicine and Fertility Centre in Colorado Springs (*American Society for Reproductive Medicine (ASRM) October 2004*) half of the women received acupuncture prior to and following embryo replacement. The women who received acupuncture had a 51% pregnancy rate compared to 36% in control group and a 0.8% miscarriage rate compared to 20% in control group. Acupuncture also was found to reduce the risk of tubal pregnancy and increase the live birth rate. The live birth rate for each IVF cycle was 23 % higher than the cycles for the control group.
- Follow on research in medical journals such as *Fertility and Sterility* supports the use of acupuncture in assisting embryo implantation. Acupuncture is usually administered 20 - 30 minutes prior to and following embryo replacement but in some of the research, women also had an extra series of treatments several weeks prior to their embryo replacement.

To view the latest research on acupuncture and fertility visit

www.acupunctureivf.com.au/pages/research_and_reviews.php

Promote a viable pregnancy

Traditional Chinese medicine can also be used in pregnancy to help promote maternal and fetal well being.

- Acupuncture to assist in the first 12 weeks of a pregnancy may be useful to reduce anxiety and induce relaxation. Research has shown that for women with a history of recurrent miscarriage, regular monitoring and stress reduction treatment in the first 12 weeks increased live birth rates. 86% of women in the treatment group, compared to 33% for women that did not receive treatment. (*Aust NZ J Obstet Gynecol* 1991:31:4:3210)
- There are also treatments to aid with any problems during pregnancy (such as morning sickness, heart burn, constipation, varicose veins, haemorrhoids, insomnia, breech and posterior presentation, anaemia, babies that are small for their gestational age, blood pressure problems and muscular skeletal pain such as back, rib and pelvic girdle pain), as well as treatment protocols to prepare for childbirth and if necessary to promote induction