

## The Ancient Art of Infertility Treatment

When it comes to getting pregnant, old world techniques may be just what today's high-tech doctors will order.

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If headlines are any indication of what's hot and what's not, it's easy to believe that infertility treatment is strictly a modern day science, made possible solely through the courtesy of high-tech medicine.

But as good as modern science is, many couples trying to get pregnant find themselves turning to an age-old treatment for help -- one so steeped in tradition it's about as far from life in the 21<sup>st</sup> century as one can get.

That treatment is acupuncture, and today, even high-tech reproductive specialists are looking to the somewhat mysterious world of Chinese medicine to help those fertility patients for whom western science alone is not quite enough.

"Most of our patients are referred to us by reproductive medicine specialists -- they are usually women who have failed one or usually more than one attempt at IVF (in vitro fertilization), and their doctor is looking for something to help implement the success of their treatment, over and above what the protocols alone can accomplish," says Raymond Chang, MD, the medical director of Meridian Medical and a classically trained acupuncturist as well as western-trained medical doctor.

Acupuncture is an ancient Chinese medicine treatment that relies on the painless but strategic placement of tiny needles into a "grid-like" pattern that spans the body, from head to toe. The needles are used to stimulate certain key "energy points" believed to regulate spiritual, mental, emotional, and physical balance. And, for many women, it's often just what the doctor ordered.

"It can allow you to cross the line from infertile to fertile by helping your body function more efficiently, which in turn allows other, more modern reproductive treatments, like IVF, to also work more efficiently," says James Dillard, MD, assistant clinical professor, Columbia University College of Physicians and Surgeons, and clinical adviser to Columbia's Rosenthal Center for Complementary and Alternative Medicine.

Indeed, in a study of 160 women, published April 2002 in the reproductive journal *Fertility and Sterility*, a group of German researchers found that adding acupuncture to the traditional IVF treatment protocols substantially increased pregnancy success.

In this study one group of 80 patients received two, 25-minute acupuncture treatments -- one prior to having fertilized embryos transferred into their uterus, and one directly afterwards. The second group of 80, who also underwent embryo transfer, received no acupuncture treatments.

The result: While women in both groups got pregnant, the rate was significantly higher in the acupuncture group -- 34 pregnancies, compared with 21 in the women who received IVF alone.

But increasing the odds of IVF is not the only way acupuncture can help. Chang says it can also work to stimulate egg production in women who can't -- or don't want to -- use fertility medications to help them get pregnant.

"When you compare the pregnancy rates for an egg producing drug such as Clomid to acupuncture alone, the rates are equal -- a 50% chance of pregnancy in three months for general patients -- to those not undergoing IVF," says Chang.

Unfortunately, however, Chang says that because acupuncture generally stimulates the growth and release of just one egg, it can't be substituted for fertility drugs used in IVF, since they work to produce the multiple eggs necessary to achieve success with this treatment

## **How Acupuncture Works**

Although acupuncture is fast becoming an accepted fertility protocol, not everyone agrees on how -- or why -- it works.

According to the traditional Chinese medicine explanation, acupuncture stimulates and moves Qi (pronounced "Chee") a form of life energy that ancient wisdom says must flow through the body unhampered from head to toe, 24/7. When it doesn't, illness or malfunctions such as infertility arise.

"Acupuncture works to restore the flow of Qi -- your essence, your body energy -- so with regards to infertility, treatment has a calming, restorative effect that increases a sense of well-being and ultimately helps the body to accept the creation of life," says acupuncturist Ifeoma Okoronkwo, MD, a professor of medicine at New York University School of Medicine.

By placing the needles at key energy meridians linked to the reproductive organs, Okoronkwo tells WebMD acupuncture increases, and more importantly, moves the flow of Qi from areas where it may be too abundant, to areas that are deficient, all in a direction that encourages fertility.

To get your fertility Qi up to snuff, most experts say you will need about two, 30 minute treatments a week, sometimes for several months, before the effects can be seen.

However, a slightly more Western way of looking at the effects points less to the mystical Qi and more towards the solid science of brain chemistry.

In studies published in the journal *Fertility and Sterility* in 2002, Chang, along with noted Cornell University reproductive endocrinologist Zev Rosenwaks, MD, found a clear link between treatment and the brain hormones involved in conception.

More specifically their research noted that acupuncture increases production of endorphins, the body's natural "feel good" brain chemical that also plays a role in regulating the menstrual cycle.

Chang says acupuncture also appears to have a neuroendocrine effect, impacting a three-way axis between the two areas of the brain involved with hormone production (the hypothalamus and the pituitary glands) and the ovaries, a constellation that ultimately impacts egg production and possibly ovulation.

In still another research paper published in the journal *Medical Acupuncture* in 2000, Sandra Emmons, MD, assistant professor of obstetrics and gynecology at Oregon Health Sciences University, reports

that acupuncture may directly impact the number of egg follicles available for fertilization in women undergoing IVF.

"My guess is that acupuncture is changing the blood supply to the ovaries, possibly dilating the arteries and increasing blood flow, so that ultimately, the ovaries are receiving greater amounts of hormonal stimulation," says Emmons, who also uses acupuncture in her traditional medical practice.

Chang says acupuncture may also help when the lining of the uterus is too weak to sustain a pregnancy -- a problem that is also known to increase the risk of chronic miscarriage.

By increasing blood flow to this area, the lining may be better able to absorb the nutrients and hormones necessary to help it grow strong enough to hold onto an implanted embryo, says Chang.

## **Can Acupuncture Help You? How to Tell**

As good as it sounds, acupuncture is clearly not the panacea for all fertility problems. As Dillard tells WebMD, in instances where a structural defect exists -- such as a blocked fallopian tube or a fibroid tumor -- acupuncture won't help you get pregnant.

Likewise, once past a certain age, no amount of tickling your Qi is going to increase necessary hormones that have long gone out of production.

For this reason, many doctors recommend that you have at least a basic fertility workup before attempting acupuncture treatment, particularly if you are approaching, or you are over, the age of 40.

"If it turns out you have structural problem that requires a traditional medical 'fix', then the sooner you find that out and get the proper treatment, the more likely it will be that you can get pregnant," says Dillard.

At the same time Chang tells WebMD that younger women -- those in their early to mid-30s -- might want to consider acupuncture first, before investing in expensive and invasive fertility treatments.

"Sometimes a few months of acupuncture will be enough to help you get pregnant on your own," he says.

If, in fact, you do seek acupuncture treatment be aware that not all protocols are equal.

"There is tremendous variability within the field -- with many different techniques and a great deal of the success dependant upon how much the acupuncturist knows about the treatment of infertility," says Okoronkwo.

Costs can also vary dramatically, ranging from several hundred dollars to \$1,000 or more, depending on how long you are treated, and who is doing the treatment. And while many insurance companies cover the cost of acupuncture treatments, some don't when treatment involves infertility, so check your policy carefully.

With that said, to help you hone in on the expert that can rock your Qi in the direction of motherhood, our experts offer the following tips:

- Look for a doctor that is adequately trained and licensed in acupuncture, as well as has a background in treating infertility. An MD who simply practices acupuncture once in a while often has just several hundred hours experience, compared to several thousand hours of training and practice required for a traditional Chinese doctor.
- Look for an acupuncturist associated with a major academic medical center.
- If you are undergoing fertility treatments with a reproductive endocrinologist, make certain that your doctor has a working relationship with your acupuncturist, and that they work in harmony to establish a treatment regimen.
- If you are not seeing a fertility specialist, do pay at least one visit to an obstetrician before seeking the help of an acupuncturist -- and make sure your obstetrician is aware of your acupuncture treatment plan.
- Although acupuncture often works in harmony with Chinese herbal medicine, if you are undergoing IVF or any traditional fertility treatment, don't take any herbs without the OK of your reproductive medicine specialist.
- If you are undergoing an IVF protocol and acupuncture simultaneously, once you reach the implantation stage it's imperative to get a pregnancy test before proceeding with more acupuncture treatments. If you are trying to get pregnant on your own it is equally important to have your pregnancy verified by an obstetrician as soon as possible. Some of the same points used to stimulate the uterus and increase fertility may also cause a miscarriage -- so your acupuncturist needs to know if you are, or could be pregnant.

#### WebMD Feature

SOURCES: James Dillard, MD, licensed acupuncturist, assistant clinical professor, Columbia University College of Physicians and Surgeons; clinical adviser, Rosenthal Center for Complementary and Alternative Medicine, Columbia University, N.Y.; director, Complementary Medicine Services, University Pain Center, N.Y. Raymond Chang, MD, physician-acupuncturist; medical director, Meridian Medical Group, New York City. Ifeoma Okoronkwo, MD, licensed acupuncturist, clinical assistant professor, New York University Medical Center, New York City. Sandra Emmons, MD, assistant professor, Obstetrics and Gynecology, Oregon Health Services University, Portland, Ore. *Fertility and Sterility*, April 2002. *Fertility and Sterility*, December 2002. *Medical Acupuncture*, Spring/Summer 2000; vol 12.