

# **Increasing Endometrial Thickness with Acupuncture in a Patient Undergoing Assisted Reproduction Therapy**

**Mark A. Lewinter, L.Ac.**  
**Anna C. Kelly, MD**

## **ABSTRACT**

**Background** Treating women with acupuncture for gynecological conditions has a history that is as long as acupuncture itself. We know that women feel better, have less PMS signs, and overcome infertility using acupuncture-but why? As we approach a time where acupuncture is frequently used in conjunction with western medical therapies, it is important to understand the scientific basis of acupuncture. Several mechanisms have been proposed to explain how acupuncture affects fertility: electro-acupuncture normalizes dysfunctions of Hypothalamic-Pituitary-Ovarian axis, decreases impedance in uterine arteries, and may increase response to gonadotropin therapy. In this case report we examined the effect of acupuncture on endometrial lining thickness.

Proper thickness of the endometrium is essential for successful implantation of an embryo. In assisted reproduction therapy (ART) one of the final assessments is the thickness of the endometrium at the time of the scheduled in-vitro fertilization (IVF) or intra-uterine insemination (IUI). Most reproductive endocrinologists like to have the endometrium lining greater than 7mm with a clear trilaminar pattern during the final few days before an IVF or IUI. If the endometrial lining is too thin or the trilaminar pattern is not clear, the ART may be canceled and the prognosis for a successful pregnancy is poor. If there is a positive beta HCG, there is an increased chance of poor placental development and miscarriage. The traditional intervention to increase endometrial lining is to increase the levels of supplemental estrogen. When a patient's endometrial lining is not thickened from increased dosages of estrogen, little more can be done. This is case report examining the value of combining acupuncture with traditional reproductive therapies to help increase endometrial thickness.

**Objective** To examine the ability of acupuncture to increase endometrial lining thickness in women undergoing In-Vitro Fertilization (IVF) and embryo transfer.

**Design, Setting, and Patient** This is a case report of a 34 year old female with a diagnosis of infertility. This patient was treated weekly 13 times in a private acupuncture clinic before frozen embryo transfer.

**Intervention** The patient was given weekly acupuncture using a Traditional Chinese Medical (TCM) approach along with moxibustion therapy, and massage. The points were selected based on TCM principles in order to tonify

Kidney and Spleen energy and to move Liver qi.

**Results** The patient received weekly acupuncture treatments for 13 weeks before frozen embryo transfer (embryos were from a previous IVF cycle). One day after baseline endometrial thickness was measured at 8.4 mm, the patient received her 13th acupuncture treatment. Four days later, endometrial thickness was measured at 10 mm without increased estrogen dose. The next day, the patient underwent transfer of three 2 to 4 celled embryos.

**Conclusions** For patients undergoing IVF with a history of decreased endometrial thickness, using acupuncture once a week may increase their lining thickness and therefore increase the chance of pregnancy. Directions for future study are to evaluate a large number of patients to better understand the impact that acupuncture can have on endometrial thickness.

**Key Words** Acupuncture, Infertility, Uterine Lining, Endometrium, In-Vitro Fertilization, Polycystic Ovarian Syndrome, Follicle Stimulating Hormone, Luteinizing Hormone

Feel free to discuss this complex and involved situation with the practitioners at Metro Acupuncture.

*This article was written by Mark Lewinter an acupuncturist at Metro Acupuncture in Atlanta , Georgia . Mr. Lewinter has treated women diagnosed with infertility since 2001 and he is a member of the American Society for Reproductive Medicine. He works in conjunction with reproductive endocrinology centers in the Atlanta area such as Atlanta Center for Reproductive Medicine, Georgia Reproductive Specialists, and Reproductive Biology Associates. Patients undergoing IVF and other assisted reproductive technologies have seen Mr. Lewinter before, during and after fertility cycles. For more information he can be contacted at 404-255-8388.*

## **BIBLIOGRAPHY**

Emmons S, Patton P. Acupuncture Treatment for Infertile Women Undergoing Intracytoplasmic Sperm Injection. *Medical Acupuncture*, 12 (2) Fall/Winter 2001/2002.

Helms J. *Acupuncture Energetics*. Medical Acupuncture Publishers, Berkeley California, 1995: 303-321.

Maciocia G. *Obstetrics and Gynecology*. Churchill Livingstone, New York, 1998: 691-739

Marshall S. *Reproductive System Energetics*, Doctoral Thesis, British College of Acupuncture, 1988

Paulus W, et al. Influence of Acupuncture on the Pregnancy Rate in Patients who Undergo Assisted Reproduction Therapy. *Fertility and Sterility*, 77(4) April 2002.

**Sterner-Victorin E, et al. Reduction of Blood Flow Impedence in the Uterine Arteries of Infertile Women with Electroacupuncture (EA). Human Reproduction, 11,6: (1314-1317) 1996.**

**West Z. Acupuncture in Pregnancy and Childbirth. Churchill Livingstone, New York 2001: 2 – 8**