Researchers from Nanjing Traditional Chinese Medicine University and Haian Traditional Chinese Medicine Hospital find acupuncture combined with herbs effective for the alleviation of endometriosis. Two patient groups were compared in a six month clinical trial. One group received Traditional Chinese Medicine (acupuncture and herbs) and the other group received mifepristone (RU-486®, a synthetic steroid that inhibits progesterone action, used for the treatment endometriosis or as an abortifacient). Ultrasonography for detection of endometriomas and growths in addition to blood tests (cancer antigen 125, anti-endometrial antibody) were used to determine treatment efficacy. The bloodwork was equivalent and ultrasonography finds both TCM and mifepristone drug therapy equal in effectiveness for the reduction of endometriomas or other growths.

About Endometriosis
Endometriosis is a condition wherein endometrial cells are displaced outside the uterus and its lining (endometrium). Dysmenorrhea (painful menstruation), chronic pelvic pain, dyspareunia (painful intercourse), or infertility are common. Optimal treatment protocols are paramount because research indicates that there is a gradual rise in endometriosis patient numbers over time. Conventional biomedical treatments include steroid medications and surgery. A troubling symptom of endometriosis is usually
moderate to severe dysmenorrhea. The pain is due, in part, to overproduction of prostaglandins from abnormal growths.

The authors of the investigation cite previous research demonstrating that acupuncture has a homeostatic and regulatory effect on prostaglandins production, thereby contributing to pain relief. They add that acupuncture has also been shown to adjust pain thresholds, prevent the spreading of endometriosis, reduce endometrioma size, and reduce the proliferation of abnormal bands of fibrous tissue.

**TCM Acupoint Logic**
The researchers present TCM logic for the implementation of the acupuncture point prescription used in their research. The Zhongji (CV3) acupoint is located on the Ren (Conception) meridian and is one of several acupoints located at the dantian (red field), an important healing area of the body. Anatomically, Zhongji corresponds with the location of the uterus. Zhongji is the meeting point of the Conception vessel with the spleen, liver, and kidney channels and is also the front mu (alarm) point of the bladder Foot Tai-Yang channel. Zhongji has both a nourishing and clearing effect, and can therefore be used to regulate blood and qi of the Chong (Penetrating) and Ren meridians, which nourish the uterus. Zusanli (ST36), a major acupoint of the stomach Foot-Yangming meridian, stimulates the regeneration of yuan (source) qi, activating the body’s ability to heal itself. Based on their uses and functions within TCM, these acupoints are chosen as two of the primary acupoints for the study.

**Objective Measurements**
Blood test results and ultrasonography were compared before and after treatment to evaluate clinical efficacy. The blood tests measured CA-125 levels and EMAb positive rates; transabdominal/transvaginal ultrasound examinations were used for pelvic region imaging. A CA-125 (cancer antigen 125) test, measured in units per milliliter (U/mL), was used to determine the amount of the CA-125 protein in the bloodstream. The normal range is considered 0–35 kU/L. An elevated number may be the result of endometriosis or may indicate ovarian, fallopian, endometrial, or peritoneal cancer. The researchers note that increases in CA-125 levels are correlated with increases of dysmenorrhea severity. Moreover, higher CA-125 levels are correlated with increased numbers of growths caused by endometriosis. The positive rates for anti-endometrial antibodies (EMAb) were also assayed because immunofluorescence reveals that positive EMAb rates are higher in women with endometriosis.
The total treatment effective rate for each patient group was derived with the following formula: \[\frac{\text{Clinical recovery} + \text{Significantly effective} + \text{Effective}}{\text{Total number of patients in group}} \times 100\%\]. The treatment efficacy for each patient was categorized into 1 of 4 tiers:

i. **Clinical recovery**: Complete absence of clinical symptoms, absence of pelvic masses.

ii. **Significantly effective**: Clinical symptoms mostly absent, shrinkage of pelvic masses.

iii. **Effective**: Clinical symptoms relieved, no increase of pelvic mass size.

iv. **Not effective**: No improvement, or worsening, of symptoms.

**The Results**

The total treatment effective rate for the acupuncture plus herbs group was 90.00%. Mifepristone produced an 86.67% total treatment effective rate. Acupuncture and herbs produced clinically equivalent results as that of mifepristone (P > 0.05). Looking at the blood test results, both groups started off with an equivalent percentage of patients that were EMAb positive, with 70.00% in the acupuncture plus herbs group and 66.67% for the mifepristone group (P > 0.05). After TCM treatment, 33.33% of patients tested positive; after mifepristone treatment, 35.00% of patients tested positive. Based on the knowledge that endometriosis patients have a higher EMAb positive rate, the numerical improvements indicate that TCM and drug therapy produce similar results.

CA-125 levels started off with equivalent amounts for both groups prior to treatment. For the acupuncture and herbs group, the mean CA-125 level before treatment was 59.60 ± 35.24 U/mL. For the mifepristone group, the mean CA-125 level before treatment was 59.62 ± 34.95 U/mL. After treatment, both groups saw an equally significant decline in CA-125 levels (P > 0.05). The mean CA-125 level for the acupuncture and herbs group was 31.75 ± 6.74 U/mL, while that for the mifepristone group was 31.94 ± 6.32 U/mL. This suggests that both treatment modalities were equally capable of alleviating dysmenorrhea and reducing endometriosis growth proliferation.

A total of 60 patients from Haian TCM Hospital were treated and evaluated in the study. They were diagnosed with endometriosis between January 2003 and December 2013. Patients were randomly divided into the TCM treatment group and the drug control group, with 30 patients in each group. The
mean age and duration of illness was similar in both groups (P > 0.05). Subjects were selected in accordance with the diagnostic standards set by the Gynecology Committee of the Chinese Medical Association in 2006. Only patients who fulfilled the following criteria were selected for the clinical trial:

i.  *Dysmenorrhea, chronic pelvic pain or dyspareunia.*

ii. *Endometriosis abnormalities detected in pelvic examination through abdominal/vaginal ultrasound and pelvic CT/MRI.*

iii. *Slightly/moderately elevated blood levels of CA125 and EMAb.*

iv. *Gross pathological findings or biopsy confirmation of endometriosis from laparoscopy.*

The primary acupoints selected for the TCM treatment group were the following:

- Zhongji (CV3)
- Guanyuan (CV4)
- Daheng (SP15)
- Tianshu (ST25)
- Wailing (ST26)
- Zusanli (ST36)
- Sanyinjiao (SP6)

Secondary acupoints were selected based on TCM differential diagnostics. For lower abdominal pain with dyspareunia, the following acupoints were added:

- Shuidao (ST28)
- Qixue (KD13)

For lower abdominal and lumbosacral pain, the following acupoints were added:

- Shuidao (ST28)
- Qipang

After disinfection, the acupoints were inserted in the following order: Zhongji, Guanyuan, Daheng, Tianshu, Wailing, Shuidao (if added), Qixue (if added), Qipang (if added), Zusanli, Sanyinjiao. For Zusanli and Sanyinjiao, the needles were manipulated with the Bu (tonifying) technique. After twenty minutes of needle retention, the needles were removed in the order that they were inserted. Acupuncture
therapy was administered for six months. For the TCM herbal treatment, a modified Lichongtang herbal
decocction was decocted and orally ingested. Each decoction was comprised of the following herbs:

- Huangqi (20g)
- Dangshen (20g)
- Baizhu (15g)
- Shanyao (15g)
- Sanling (15g)
- Ezhu (15g)
- Jineijin (10g)
- Danshen (15g)
- Danggui (15g)
- Taoren (10g)
- Honghua (10g)
- Yanhusuo (15g)
- Xiangfu (10g)
- Zhigancao (5g)

Secondary herbs were added based on individual symptoms. For dysmenorrhea and a general feeling of
coldness, the following herbs were added:

- Paojiang
- Guizhi
- Wuyao

For backache or rectal prolapse, the following herbs were added:

- Duzhong
- Tusizi
- Shengma
- Chaihu

For clotting during menstruation or amenorrhea, the following herbs were added:

- Danggui
- Chuanxiong
One 400 ml decoction was consumed daily, 200 ml in the morning and 200 ml at night. The decoction was double brewed, adding water on the second brew. Patients took the herbal decoction for 6 months. For the drug control group, 12.5 mg of mifepristone was orally administered daily, greater than 2 hours after dinner, for 6 months. The results of the study, based on ultrasonography and blood assays, demonstrate that acupuncture and herbs are a viable treatment option for women with endometriosis.
References:


