

## Yale Researchers to Study Acupuncture for Pregnancy-Related Back Pain

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Scientists at Yale University School of Medicine have been awarded a \$400,000 grant from the National Institutes of Health to observe the effects of acupuncture in relieving low back pain in pregnant women. The study will be conducted over a three-year period, and will attempt to find a safe, natural remedy for one of the most common - and unwanted - side-effects associated with pregnancy.

"The goal of the study is to see if we have any kind of impact on the intensity and duration of lower back pain," said Dr. James Yue, a professor of orthopedic surgery at Yale and one of several practitioners who will participate in the project. "There's been no other study like this done before, so it's kind of unique. To get an NIH grant for this study is quite significant."<sup>1</sup>

Previously published studies<sup>2-4</sup> indicate that between 45 percent and 75 percent of all women experience back pain during pregnancy, usually during the time between the sixth and ninth months of pregnancy. Although the exact cause remains unclear, weight gain and a shift in a woman's center of gravity are believed to be contributing factors. Smoking, labor-intensive work, and a history of low back problems prior to pregnancy also can increase the incidence of back pain. Symptoms are usually worse in the evening, can often affect sleep, and may interfere with a woman's ability to perform some daily tasks or require her to need time off from work.

Dr. Shu-Ming Wang, an associate professor of anesthesiology at the medical school, will be the lead investigator for the study. Dr. Wang's interest in the subject stems from a personal encounter with a colleague three years ago, who began to suffer from severe low back pain and sciatica in the final months of her pregnancy.

"I happened to be learning acupuncture at the time, and she needed help," Dr. Wang explained in an interview with the *Yale Daily News*. "She let me put a needle in her ear, and her pain went away."

In the trial, researchers will observe the effects of acupuncture in at least 150 pregnant women, all of whom are at least 24 weeks pregnant and are suffering from lower back pain. The women will be divided into three groups of approximately 50 patients apiece. Two groups of women will receive slightly varying acupuncture treatments. A third group will receive no treatment and will serve as controls.

Among patients receiving acupuncture, one group will receive "true" acupuncture, with press needles inserted into three specific points on the side of one ear, depending on the location of the pain. If the pain is more prevalent on the right side, for example, needles will be inserted into the right ear. If the pain is more prevalent in the middle of the back, ears will be needled depending on whether the patient is right- or left-handed. The second group will receive "sham" acupuncture at three points that

have not been determined to be effective in treating back pain.

The needles will remain in the women's ears for one week. Press needles are being used because they can remain in the ears 24 hours a day, and will not interfere with most of the patients' daily activities.

"They can sleep, and shower, and forget about the needles - other than when they answer the telephone," said Dr. Wang.

At baseline, the women will fill out a series of questionnaires designed to measure existing pain and disability levels from several perspectives. After being assigned to a group, the women will be required to fill out a pain diary that documents their pain and disability levels over the previous 24 hours, and submit the results to the researchers every other day. After one week, the women will be asked to remove the needles. Pain diary results will be measured for a total of two weeks after the treatment was initiated and compared to baseline levels. Women who were assigned to the control group, and those whose back pain did not improve through acupuncture, will be invited to return for additional treatments at no cost once the two-week study period is completed.<sup>5</sup>

While there still remains some disagreement over the efficacy of acupuncture, Wang and Yue told the *Daily News* that acupuncture is widely accepted by the general public, and that acceptance by the medical profession is increasing. They also believe their study will encourage future trials that will help validate acupuncture's effectiveness.

"A lot of the controversy comes from the East-meets-West theory of medicine," Yue said. "There's been a change in the thought process on a basic level here in the States. So this is a seminal step in a lot of directions."

Other researchers on the project include Drs. Michael Berman, Ferne Braverman, Zeev Kain and Haiqun Lin.

As of press time, the Yale researchers are still recruiting patients for the study. Persons who would like more information or are interested in participating are encouraged to contact Dr. Wang at (203) 737-1149 and leave their name and contact information.

### References

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