



Acupuncture Stimulation and Obstetrics: “To Stick or Not to Stick?—That Is the Question”

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As the popularity of complementary medicine increases and as more pregnant women choose to take fewer medications, acupuncture may be offered to patients to alleviate nausea and pain in pregnancy, as well as to relieve symptoms of depression.

Acupuncture is an important treatment modality of traditional Chinese medicine; it involves stimulation of specific points by manually inserting and manipulating fine needles into the skin, with the aim of curing disease and/or promoting health.¹ The use of acupuncture has existed for centuries, with the first recorded instance almost 2,000 years ago in the medical text *Yellow Emperor's Inner Classic (Huangdi Neijing)*.²

The popularity of acupuncture in America was muted until 1971, when a journalist in the presidential press corps experienced symptomatic relief after being treated for postoperative abdominal distension while on President Nixon's historic trip to China.³ Nixon's rapprochement with China normalized relations with the Middle Kingdom and, in addition, exposed the American populace to the medical practice of acupuncture.

Since that time, acupuncture and complementary medicine as a whole have increased in popularity worldwide. This newfound interest in acupuncture has, not surprisingly, penetrated the realm of obstetrics and gynecology. With recent data suggesting an increase in the number of pregnant women who wish to take fewer medicines, there has been a recorded increase in the use of acupuncture in labor and delivery units, despite limited scientific evidence of its effectiveness.⁴

NAUSEA AND VOMITING

Nausea and vomiting are common symptoms affecting 50% to 90% of pregnant women.^{5,6} While pharmacologic therapy has been the mainstay of treatment, evidence has accumulated to suggest that acupuncture may provide some relief for this malady. The exact point of stimulation is located at the PC6 point (*Neiguan*), which is 3 finger-width breadths above the wrist crease, between the 2 tendons.⁷

A recent meta-analysis explored the concept of acupuncture as a treatment modality for nausea and vomiting. The overall results of the meta-analysis were favorable, indicating that acupuncture stimulation is effective in relieving symptoms of nausea and vomiting in pregnancy, but interestingly, acupressure (physical pressure at the PC6 point) and electrostimulation (electrical impulses at the PC6 point) tended to have a greater effect than acupuncture alone.⁷ The mechanism behind this is unknown but seems to lie within the effect that

acupuncture has on the chemoreceptor trigger zone involved in the vomiting reflex.⁸

BACK AND PELVIC PAIN

Pregnancy-related pelvic girdle pain and lower back pain are common problems with significant physical, psychologic, and socioeconomic implications.⁹ Twenty-five percent of women with pelvic pain in pregnancy will seek medical help for their pain; 8% are severely disabled, and 7% continue to have pain beyond pregnancy.¹⁰

Acupuncture has been used successfully to alleviate this problem.¹¹ In addition, evidence to date has suggested that acupuncture may be more effective than standard therapy (which includes physiotherapy). The mechanism is uncertain, but it is hypothesized that the effect could lie in sustained depression of the dorsal horn of the spinal cord.^{10,12}

INDUCTION OF LABOR

Pregnancy and the birthing experience can be a traumatic time for the soon-to-be mother. As a growing number of expectant mothers move away from pharmacologic intervention, there has been a rise in the use of acupuncture as a mode of treatment. Current evidence is sparse, and a recent meta-analysis has concluded that acupuncture does not accelerate movement into active labor.⁴

PAIN RELIEF IN LABOR

For most women, labor causes severe pain, similar in degree to that caused by complex regional pain syndromes or the amputation of a finger.^{13,14} Pain management is an essential part of good obstetric care, although not all women request analgesia during labor and delivery.¹³ As patients look for different modalities of treatment for pain relief, acupuncture has been suggested as a favorable alternative.

Since acupuncture is used widely for pain relief, it is surprising that much of the evidence to date is conflicting. A recent meta-analysis found little convincing evidence that women receiving acupuncture are more likely to experience less labor pain than those in the control groups.¹⁵ What it did find, however, is that acupuncture did have a transient effect, which lasted on average 30 minutes, and in addition there was a

FOCUSPOINT
Recent data suggest there has been an increase in the use of acupuncture in labor and delivery units, despite limited scientific evidence of its effectiveness.

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reduction in meperidine and other analgesia use.¹⁵

DEPRESSION AND PREGNANCY

Women of childbearing age often suffer from major depression, which is most prevalent among people ages 25 to 44.¹⁶ Major depressive disorder during pregnancy can have deleterious effects on mothers, infants, and families, regardless of the timing of its onset.¹⁷ The treatment of major depression during pregnancy has therefore been identified as a priority area for improvement in the clinical management of depression by both the Committee on Research on Psychiatric Treatments of the American Psychiatric Association and, independently, the Summit on Women and Depression.¹⁸

Due to maternal treatment preferences and concerns about potential fetal and infant health outcomes, nonpharmacologic treatment options are needed.¹⁹ In fact, many pharmaceutical companies advise against taking their antidepressants during pregnancy. As a result, different modalities of treatment that avoid pharmacologic intervention have been sought. Of these, psychotherapy was initially investigated and deemed to be safe in pregnancy. In a study of interpersonal therapies only, psychotherapy was successful but was noted to be expensive.¹⁸

Acupuncture was then pursued as an alternative modality for treatment of depression. Currently, evidence has been favorable, with one paper indicating a response rate of 63%.²⁰ A recent randomized controlled trial agreed with these results, revealing that acupuncture specific for depression was associated with a significantly greater decrease in depression symptom severity and a higher rate of response, compared with the combined controls and relative to the control acupuncture (acupuncture not specific for depression).²¹ In the same article it was speculated that somatic treatments, such as acupuncture and massage, might be particularly relevant to pregnant women, as they alleviate some of the physical discomfort of pregnancy that overlaps with depression.

CONTRAINDICATIONS

Acupuncture needling is contraindicated in the area of an unstable spine due to meta-

static disease, acute injury, or osteomyelitis in a patient with good neurologic function below that level. It is safe to treat mild degenerative conditions, osteoporosis, or areas of old injury.²²

PLACEBO EFFECT

As the popularity of acupuncture grows, so does the debate on whether acupuncture's effects are more psychologic than physiologic. *The New York Times* plunged into the fray with a detailed look into this phenomenon.²³ It quoted a recent article in *Arthritis Care and Research* that attempted to answer this question.²⁴ The results from this study were surprising, not in the fact that it showed pain relief in traditional Chinese acupuncture similar to that of sham (not following traditional Chinese acupuncture), but rather that pain relief was still noted in both the sham and traditional methods. Haake et al reported this phenomenon and suggested a possible "super" placebo effect that is still disputed.^{25,26}

CONCLUSION

Acupuncture, while a relatively new modality in Western medicine, has been used in Eastern medical practice for thousands of years. As the popularity of complementary medicine (which includes acupuncture) grows and as more women choose to take fewer medications in pregnancy, acupuncture has seen a small but determined rise. Unfortunately, evidence for the efficacy of acupuncture has not risen with its popularity. A number of meta-analyses have been published recently, and almost all of these lament the lack of rigorous trials, making conclusions on the use of acupuncture difficult.

To stick or not to stick? While the use of acupuncture has grown and its perinatal risks have been deemed to be small,²² the "sticking" point still remains—that we are still a few pins short of a definitive answer.

The authors report no actual or potential conflicts of interest in relation to this article.

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FOCUS POINT
Conclusions about the use of acupuncture are difficult due to the lack of rigorous trials.

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