

Association between acupuncture applied during menstruation and change of menstrual cycle among female patients: a prospective study in Northern China

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July 7, 2020

Abstract

Background: Previous studies demonstrated that acupuncture is a safe treatment in general population, however, the safety of acupuncture during menstruation remains controversial. This study aimed to evaluate the safety of acupuncture during menstruation, using change of menstrual cycle as primary outcome. **Methods:** women who were going to receive at least 12 times acupuncture in the coming one month regardless of diagnosis, and experienced at least one menstruation during the period were recruited from four hospitals in Northern China from March 2017 to March 2018. Patients were followed up 3 menstrual cycles since acupuncture treatment, and data was collected through a questionnaire at baseline and 3 follow-up visits. Chi-square tests and logistic regression were used to test the associations between timing of acupuncture and change of menstrual cycle. **Result:** there were 373 female patients included in analysis, of which 208(55.8%) had acupuncture during menstruation(AM group) and 165(44.2%) did not(NM group). Nearly one fifth(68, 18.2%) of all patients experienced a change in menstrual cycle. The percentage of patients with changed menstrual cycle in AM group(19.7%) was higher than that of NM group(16.4%), but the difference was not significant(OR 1.254, 95% CI 0.647 to 2.431, P=0.503) when adjusted for age, history of menstrual cycle and diagnose. **Conclusion:** This study indicated that the rate of menstrual cycle change did not differ among patients who received acupuncture during menstruation or not. However, the interpretation and conclusion of the results should be cautious due to the limitations of the study. **Key Words:** acupuncture, timing, menstrual cycle change, adverse events, safety

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Statements

Question: What's already known about this topic?

Answer: Previous studies demonstrated that acupuncture is a safe treatment in general population, however, the safety of acupuncture during menstruation remains controversial.

Question: What does this article add?

Answer: The result of the study showed that the rate of menstrual cycle change did not differ between acupuncture during menstruation group and non acupuncture during menstruation group.

Background

Acupuncture has been applied in treating many kinds of gynecological diseases, such as dysmenorrhea^{1,2}, pelvic inflammatory disease³, diminished ovarian reserve⁴, stress urinary incontinence⁵ and etc. Both individual studies and systematic reviews demonstrated that acupuncture is a safe treatment in general population⁶⁻⁹, however, the safety of acupuncture during menstruation remains controversial^{9,10}. Some case reports¹¹⁻¹³ showed that after acupuncture during menstruation, patients suffered persistent irregularity of menstruation and specific adverse symptoms, such as abdominal pain, vomiting, headache, sweating or

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