

# Can electroacupuncture improve symptoms of mild to moderate postnatal depression?

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		<input type="checkbox"/> Protocol
<b>Registration date</b> 23/05/2019	<b>Overall study status</b> Completed	<input type="checkbox"/> Statistical analysis plan
		<input type="checkbox"/> Results
<b>Last Edited</b> 15/03/2023	<b>Condition category</b> Mental and Behavioural Disorders	<input type="checkbox"/> Individual participant data
		<input type="checkbox"/> Record updated in last year

## Plain English summary of protocol

### Background and study aims

Postpartum (postnatal) depression can start in parents before or after the birth of a baby. It is a serious problem because it can affect bonding between the parents and baby and childcare routines. If a mother is breastfeeding, it might not be safe to take antidepressant tablets, because breast milk can contain some of the drug. There is a new drug called Zulresso that is taken through a vein using a drip. It is safe to use during breastfeeding but is expensive. Electroacupuncture involves very fine needles being inserted into the skin at certain points and electric current being passed through them. Electroacupuncture is cheap and does not affect breastfeeding. This study aims to investigate whether electroacupuncture can help with postpartum depression symptoms.

### Who can participate?

Women who have postpartum depression within one year of their baby's birth.

### What does the study involve?

Participants will be randomly allocated to one of two groups. They will not know which group they are in. Both groups will receive supportive psychotherapy. One group will receive electroacupuncture twice a week for 6 weeks. The other group will have sham electroacupuncture, where the needles are not put in the correct places and the current is not turned on.

### What are the possible benefits and risks of participating?

Both groups will receive treatment in the form of supportive psychotherapy. There are some potential side effects of electroacupuncture, including bleeding, bruising and pain, but these are generally mild and will stop quickly.

### Where is the study run from?

China Academy of Chinese Medical Sciences (China)

### When is the study starting and how long is it expected to run for?

January 2018 to December 2022.

Who is funding the study?  
The Ministry of Science and Technology of the People's Republic of China

Who is the main contact?  
Mrs Hong Zhao, hongzhao2005@aliyun.com

## Contact information

**Type(s)**  
Scientific

**Contact name**  
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## Additional identifiers

**Clinical Trials Information System (CTIS)**  
Nil known

**ClinicalTrials.gov (NCT)**  
Nil known

**Protocol serial number**  
None

## Study information

**Scientific Title**  
The effect of electroacupuncture on mild to moderate postpartum depression: a randomized controlled single-blind study.

**Study objectives**  
The morbidity of mild to moderate postpartum depression is increasingly rising. However, the need of lactation prevents the use of regular oral antidepressants. The new antidepressant Zulresso (brexanolone), which has been approved by the FDA for postpartum depression, costs USD 34,000 dollars per treatment course per person. Acupuncture might offer an advantage in mild to moderate postpartum depression because it does not affect breastfeeding. However, the supporting evidence is weak. This trial is designed to provide high-level evidence regarding

whether electroacupuncture is effective in relieving the symptoms of mild to moderate postpartum. We hypothesize that the effect of electroacupuncture on mild to moderate postpartum depression will be better than that of sham electroacupuncture.

## **Ethics approval required**

Old ethics approval format

## **Ethics approval(s)**

1. Approved 26/07/2018, Acupuncture and Moxibustion Hospital, China Academy of Chinese Medical Science (No.16, Nanxiaojie, Dongzhimennei, Beijing; +86 010-64060868; yuxc@acutimes.com), ref: 2018-05-25-3-2
2. Approved 10/09/2018, Beijing Obstetrics and Gynecology Hospital, Capital Medical University (17 Qihelou St, Dongcheng District, Beijing; +86 010-85968407; fcyylunli@163.com), ref: 2018-KY-053-01

## **Study design**

Two-armed single-blind randomized controlled interventional trial

## **Primary study design**

Interventional

## **Study type(s)**

Treatment

## **Health condition(s) or problem(s) studied**

Postpartum depression

## **Interventions**

Eligible patients will be randomly assigned into treatment group or control group using SAS software. Group assignment information will be kept in sealed envelopes. According to their group assignment, patients will receive either electroacupuncture plus supportive psychotherapy or sham electroacupuncture plus supportive psychotherapy. Both groups will receive treatment twice a week for 6 weeks, and the whole treatment course is 12 sessions. The treatment group will receive the electroacupuncture and the selected acupoints are as follows: Ophryon (EX-HN 3), Xinshu (BL 15), Geshu (BL 17), Ganshu (BL 18), Shenshu (BL 23), Hegu (LI 4), Sanyinjiao (Sp 6), Zhongwan (CV 12) and Baihui (GV 20). The control group will receive sham electroacupuncture. The practitioner will needle locations beside the acupoints at superficial layers and use the electroacupuncture device without current output as the sham acupuncture.

## **Intervention Type**

Other

## **Primary outcome(s)**

Severity of depression using the first 17 answers on Hamilton Depression Rating Scale (HAM-D). The 17-HAMD will be measured by a professional psychiatrist at baseline and weeks 2, 4 and 6

## **Key secondary outcome(s)**

1. Severity of depression using the Montgomery-Åsberg Depression Rating Scale (MADRS) at baseline and weeks 2, 4 and 6
2. Postpartum depression assessed using the Edinburgh Postnatal Depression Scale at baseline,

weeks 2, 4 and 6 and week 10 (4 weeks after treatment end)

3. Alertness assessed using the Stanford Sleepiness Scale at baseline and weeks 2, 4 and 6

4. Maternal functional status assessed using the Barkin Index of Maternal Functioning at baseline, weeks 2, 4 and 6 and week 10 (4 weeks after treatment end)

5. Severity of depression using the first 17 answers on Hamilton Depression Rating Scale (HAM-D) at week 10 (4 weeks after treatment end)

6. Participant assessment of depression assessed using the Patient Health Questionnaire (PHQ-9) at baseline and weeks 2, 4 and 6

### **Completion date**

30/12/2022

## **Eligibility**

### **Key inclusion criteria**

1. Diagnosed with postpartum depression according to The Diagnostic and Statistical Manual of Mental Disorders (DSM) by psychiatrists

2. Conceived naturally or artificially

3. Aged 20–50 years

4. Overall score of  $\geq 9$  on the Edinburgh Postnatal Depression Scale (EPDS)

5. Diagnosed with mild to moderate postpartum depression according to the 17-item Hamilton Depression Scale (17-HAMD)

6. Postpartum depression onset time within 1 year after delivery

7. Can accept electroacupuncture treatment and complete the prescribed course of treatment

8. Agrees to participate in the study willingly and voluntarily and signs the informed consent form

### **Participant type(s)**

Patient

### **Healthy volunteers allowed**

No

### **Age group**

Adult

### **Sex**

Female

### **Total final enrolment**

60

### **Key exclusion criteria**

1. Brain disease or mental retardation, or have difficulty understanding the contents of questionnaires or are unable to communicate effectively

2. History of epilepsy, bipolar disorder, schizophrenia or schizoaffective disorder

3. History of suicide attempts

4. Diagnosed with non-depressive psychosis by psychiatrists

5. Addicted to alcohol or drugs

6. Received antidepressant therapy within the past month

7. Hemorrhagic diseases or infectious diseases or otherwise unable to receive acupuncture therapy

**Date of first enrolment**

01/10/2018

**Date of final enrolment**

30/10/2022

## **Locations**

**Countries of recruitment**

China

**Study participating centre**

**Institute of Acupuncture and Moxibustion, China Academy of Chinese Medical Sciences**

16 Nanxiaojie

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China

100700

**Study participating centre**

**Beijing Obstetrics and Gynecology Hospital**

17 Qihelou St

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100020

**Study participating centre**

**Shenzhen Traditional Chinese Medicine Hospital**

1 Fuhua Road

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## **Sponsor information**

**Organisation**

China Academy of Chinese Medical Sciences

**ROR**

<https://ror.org/042pgcv68>

## Funder(s)

**Funder type**

Government

**Funder Name**

Ministry of Science and Technology of the People's Republic of China

**Alternative Name(s)**

Chinese Ministry of Science and Technology, Ministry of Science & Technology, People Republic of China, , Ministry of Science and Technology (China), State Science and Technology Commission, MOST

**Funding Body Type**

Government organisation

**Funding Body Subtype**

National government

**Location**

China

## Results and Publications

**Individual participant data (IPD) sharing plan**

The datasets generated and/or analysed during the current study during this study will be included in the subsequent results publication.

**IPD sharing plan summary**

Other

**Study outputs**

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
<a href="#">Participant information sheet</a>	Participant information sheet	11/11/2025	11/11/2025	No	Yes