

# Acupressure of the ear for fatigue, sleep problems and anxiety in cancer patients treated with chemotherapy

<b>Submission date</b> 07/05/2018	<b>Recruitment status</b> No longer recruiting	<input type="checkbox"/> Prospectively registered
<b>Registration date</b> 10/05/2018	<b>Overall study status</b> Completed	<input type="checkbox"/> Protocol
<b>Last Edited</b> 23/11/2020	<b>Condition category</b> Mental and Behavioural Disorders	<input type="checkbox"/> Statistical analysis plan
		<input checked="" type="checkbox"/> Results
		<input type="checkbox"/> Individual participant data

## Plain English summary of protocol

### Background and study aims

Cancer-related fatigue (CRF) is common in lung cancer patients treated with chemotherapy and this can affect the patient's quality of life. Auricular acupressure (stimulating acupuncture points on the ear without using needles or breaking the skin) has been increasingly used to manage symptoms in cancer patients.

### Who can participate?

People aged 18-75 years who are receiving chemotherapy (drug treatment) for lung cancer

### What does the study involve?

In the two intervention groups, patients will have a small ball-shaped seed or a magnetic ball taped to five acupressure points on their ear. They will press each seed or ball against the ear 4 to 6 times per session at 5 sessions per day. They will do this every day for 18 days to complete a cycle of therapy. They will have 3 days with no seed or balls taped to their ear before starting the next 18-day course. There are 3 18-days courses in the study. Patients in the control group will receive the usual care for lung cancer patients treated with chemotherapy.

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

There are no side effects linked with auricular acupressure reported previous studies. Participants will receive a certain amount of compensation for their time.

### Where is the study run from?

First Affiliated Hospital of Soochow University

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

December 2016 to August 2018

### Who is funding the study?

Suzhou Municipal Science and Technology Bureau

Who is the main contact?  
Dr Tian Li, tianlisz@suda.edu.cn

## Contact information

**Type(s)**  
Scientific

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## Additional identifiers

**EudraCT/CTIS number**

**IRAS number**

**ClinicalTrials.gov number**

**Secondary identifying numbers**  
N/A

## Study information

**Scientific Title**  
Auricular acupressure for cancer-related fatigue, sleep disturbance and anxiety in lung cancer patients undergoing chemotherapy

**Study objectives**  
Auricular acupressure (AA) can alleviate cancer-related fatigue, sleep disturbance and anxiety in lung cancer patients

**Ethics approval required**  
Old ethics approval format

**Ethics approval(s)**  
Ethics Committee of the First Affiliated Hospital of Soochow University, 03/03/2017, 2017028

**Study design**  
Randomised controlled trial

**Primary study design**

Interventional

## Secondary study design

Randomised controlled trial

## Study setting(s)

Hospital

## Study type(s)

Treatment

## Participant information sheet

Not available in web format, please use the contact details below to request a patient information sheet.

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

Fatigue, sleep disturbance and anxiety in lung cancer patients with no severe complications

## Interventions

Those patients who met the study criteria were randomly assigned to one of three groups using computer-generated numbers.

Group A: auricular acupressure using Semen Vaccariae (SV, seed of cowherb [*Vaccaria segetalis*]) Disinfect the skin with 75% alcohol, dry the skin, and place a piece of tape with SV on the selected ear acupoint. Vertically press the SV until the patients report the feeling of swelling pain, continue to press each acupoint for 20 to 30 seconds, and press the five selected acupoints repeatedly and in turn 4 to 6 times for each session, with 5 sessions per day (i.e., in the morning, after each of 3 meals and before bedtime). Replace the SV tape every 3 days. One treatment course included six replacements, the interval between two consecutive treatment courses was three days, and the whole intervention length of the study was three treatment courses, i.e. three cycles of therapy.

Group B: auricular acupressure using magnetic beads

The intervention protocols for group B and group A were the same; the only difference was that magnetic beads were used in group B in place of SV.

Group C: routine care

Patients received routine care during hospitalization, and after discharge, regular telephone follow-up and home visits were performed.

## Intervention Type

Other

## Primary outcome measure

Cancer-related fatigue (CRF) was assessed by the Cancer Fatigue Scale - Chinese version (CFS-C) using a numerical rating scale ranging from 0 to 10, with 10 indicating severe CRF and  $\geq 4$  indicating clinically significant fatigue. CRF was measured at baseline and at the end of the whole intervention, i.e. after the patients received three cycles of therapy.

## Secondary outcome measures

1. Sleep quality and quantity in the past month was assessed using the Pittsburgh Sleep Quality Index (PSQI)

2. Anxiety was assessed using the Self-rating Anxiety Scale (SAS)  
Sleep disturbance and anxiety were measured at baseline and at the end of the whole intervention, i.e. after the patients received three cycles of therapy.

**Overall study start date**

01/12/2016

**Completion date**

31/08/2017

## **Eligibility**

**Key inclusion criteria**

1. Aged 18-75 years
2. Receiving conventional chemotherapy for lung cancer
3. Diagnosed with CRF using the diagnostic standards of the International Statistical Classification of Diseases and Related Health Problems 10th Revision and showed CRF  $\geq 4$  on a 0-10 numerical rating scale
4. No infection, injury or ulcers around the acupoint
5. No previous participation in AA or any fatigue-related intervention
6. No cognitive impairment
7. Willing to participate

**Participant type(s)**

Patient

**Age group**

Adult

**Lower age limit**

18 Years

**Upper age limit**

75 Years

**Sex**

Both

**Target number of participants**

75

**Total final enrolment**

100

**Key exclusion criteria**

Patients who had pleural effusion and other severe complications (such as severe anemia, severe organic diseases or dysfunction of heart, brain, or kidney) were excluded

**Date of first enrolment**

01/12/2016

**Date of final enrolment**

30/06/2017

## **Locations**

**Countries of recruitment**

China

**Study participating centre**

**First Affiliated hospital of Soochow University**

No. 188 Shizi street

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## **Sponsor information**

**Organisation**

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**Sponsor type**

Government

**ROR**

<https://ror.org/02vpk4745>

## **Funder(s)**

**Funder type**

Not defined

**Funder Name**

Suzhou Science and Technology Development Project (SYS 201526)

# Results and Publications

## Publication and dissemination plan

Planned publication in a high-impact peer reviewed journal

## Intention to publish date

31/08/2018

## 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

Data sharing statement to be made available at a later date

## Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
<a href="#">Results article</a>	results	01/03/2021	23/11/2020	Yes	No