The effect of acupuncture compared with sham acupuncture and estazolam in primary insomnia

Submission date	Recruitment status No longer recruiting	Prospectively registered	
24/01/2010		☐ Protocol	
Registration date	Overall study status	Statistical analysis plan	
10/03/2010	Completed	[X] Results	
Last Edited	Condition category	[] Individual participant data	
29/10/2013	Nervous System Diseases		

Plain English summary of protocol

Not provided at time of registration

Contact information

Type(s)

Scientific

Contact name

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Additional identifiers

Protocol serial number

02

Study information

Scientific Title

A single-blind, randomised, sham controlled study of acupuncture in improving daytime functioning of patients suffering from primary insomnia compared with sham acupuncture and estazolam

Acronym

EAPI

Study objectives

Patients suffering from long time of insomnia always complain of daytime impairments such as sleepiness, fatigue, alertness, anxiety, worrying, and quality of life, etc., and daytime deficits would presumably have a more negative impact on quality of life. Studies have mainly reported treatment effects of the nocturnal aspects of insomnia, so sufficient attention to daytime functions is needed. Hypnotics are by far the most common treatment offered for insomnia. More or less hypnotics may change the normal structure of sleep which causes worse daytime impairment. Comparatively acupuncture has the advantages of fewer side effects than hypnotics. Studies have shown its significant improvements in nocturnal aspects of insomnia, so it may be also effective in improving daytime functioning as well.

Ethics approval required

Old ethics approval format

Ethics approval(s)

Medical Ethical Committee of the Beijing TCM Hospital approved on the 25th August 2009

Study design

Single centre single-blind randomised sham-controlled study

Primary study design

Interventional

Study type(s)

Treatment

Health condition(s) or problem(s) studied

Primary insomnia

Interventions

This is a six-week, single-blind, randomised, sham-controlled study. A total of 150 untreated patients with primary insomnia will be recruited. Under single-blind conditions, patients will be randomly assigned to one of the three groups:

Group A:

Active acupuncture with estazolam placebo tablet for six weeks. Active acupuncture is conducted by stimulating 5 acupoints: Shen-Ting (DU-24), Si-Shen-Cong (EX-HN1), San-Yin-Jiao (SP-6), Shen-Men (HT-7) and Bai-Hui (DU-20) for 30 minutes every other day. Stainless steel needles of 0.35 mm diameter are inserted at a depth of 10 mm obliquely into Bai-Hui (Du-20) Shen-Ting (DU-24) and Si-Shen-Cong (EX-HN1), 10 mm straightly into San-Yin-Jiao (SP-6) and 5 mm straightly into Shen-Men (HT-7). In the day without acupuncture intervention one estazolam placebo tablet should be taken before sleep.

Group B:

Estazolam combined with sham acupuncture for six weeks. Sham acupuncture is conducted by stimulating 4 acupoints every other day: Bi-Nao (LI-14), Shou-San-li (LI-10), Yu-Ji (LU-10) and Feng-Shi (GB-31). Stainless steel needles of 0.35 mm diameter are inserted straightly at a depth of 10 mm into the four points. According to traditional Chinese medicine theory, these four

acupoints have no effect for insomnia. Estazolam dose is given 1 mg in the day without acupuncture intervention before sleep.

Group C:

Sham acupuncture with estazolam placebo tablet for six weeks. Sham acupuncture is conducted as the group B. In the day without acupuncture one estazolam placebo tablet should be taken before sleep.

The reason for taking the invention every other day is for the convenience of the patients and avoiding addiction of estazolam.

Intervention Type

Other

Phase

Not Applicable

Primary outcome(s)

- 1. Sleepiness measured using the Epworth Sleepiness Scale. Assessments will be conducted at baseline and at day 7, 14, 28, 42 and 2 months follow-up.
- 2. Sleep diary assessments will be conducted every day until 2 months follow-up

Key secondary outcome(s))

- 1. Changes in the Pittsburgh Sleep Quality Index (PSQI). Assessments will be conducted at baseline and at day 28, 42 and 2 months follow-up.
- 2. Changes in the 36-item Short Form Health Survey (SF-36) scores. Assessments will be conducted at baseline and at day 28, 42 and 2 months follow-up.

Completion date

01/12/2010

Eligibility

Key inclusion criteria

- 1. Either gender aged 25 75 years
- 2. Have primary insomnia diagnosed from International Classification of Diseases, 10th Edition (ICD-10)
- 3. Patients with insomnia persistent for 4 weeks or longer before the start of observation period
- 4. Have not yet received any psychoactive medications
- 5. Patients who submit written informed consent for study entry
- 6. Able to take part in the entire treatment and data collection procedure

Participant type(s)

Patient

Healthy volunteers allowed

No

Age group

Adult

Sex

All

Key exclusion criteria

- 1. Diagnosis of depression, anxiety or schizophrenia
- 2. Diagnosis of serious disease of heart, brain, kidney or liver
- 3. History of sleep apnoea (temporary cessation of breathing during sleep)
- 4. Suffering from insomnia less than 4 weeks
- 5. Treatment with investigational drugs in past six months
- 6. Ever received acupuncture against insomnia, or during the last year received acupuncture for any indication

Date of first enrolment

01/08/2009

Date of final enrolment

01/12/2010

Locations

Countries of recruitment

China

Study participating centre

Acupuncture Department of Beijing TCM Hospital

Beijing China

100011

Sponsor information

Organisation

Beijing Hospital of Traditional Chinese Medicine (China)

ROR

https://ror.org/057vq6e26

Funder(s)

Funder type

Government

Funder Name

Beijing Administration Bureau of Traditional Chinese Medicine (China)

Results and Publications

Individual participant data (IPD) sharing plan

IPD sharing plan summary

Not provided at time of registration

Study outputs

Output type	Details	Date created Date added	Peer reviewed?	Patient-facing?
Results article	results	01/01/2013	Yes	No
Participant information sheet	Participant information sheet	11/11/2025 11/11/2025	i No	Yes