

# The clinical study of intercostal nerve pulsed radiofrequency in postherpetic neuralgia

<b>Submission date</b> 10/06/2010	<b>Recruitment status</b> No longer recruiting	<input type="checkbox"/> Prospectively registered
<b>Registration date</b> 21/06/2010	<b>Overall study status</b> Completed	<input type="checkbox"/> Protocol
<b>Last Edited</b> 26/07/2013	<b>Condition category</b> Nervous System Diseases	<input type="checkbox"/> Statistical analysis plan
		<input checked="" type="checkbox"/> Results
		<input type="checkbox"/> Individual participant data

**Plain English summary of protocol**  
Not provided at time of registration

## 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

The clinical study of intercostal nerve pulsed radiofrequency in postherpetic neuralgia: A randomised controlled trial.

## Study objectives

1. That pulsed radiofrequency of intercostals nerve was effective and safe in chronic refractory postherpetic neuralgia (PHN) patients
2. This pulsed radiofrequency can improve the quality of life and reduce the oral pain-related drugs dosage of PHN patients

## Ethics approval required

Old ethics approval format

## Ethics approval(s)

1. The ethics committee of Xinhua Hospital (affiliated to Shanghai Jiaotong University School of Medicine) approved on the 16th of March 2010 (ref: 2010-002)
2. The ethics committee of Shanghai Sixth People's Hospital approved on the 28th of October 2009 (ref: 2009-96)

## Study design

Prospective double blind 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 contact details below to request a patient information sheet

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

Postherpetic neuraglia (PHN)

## Interventions

Patients were randomised to receive one of the following treatments, once a week for 3 weeks:

1. Pulsed radiofrequency (42 degree, 120 second) of the intercostal nerve (Thoracic 1 to T12 level)
2. Sham procedure, apparatus was left in test mode without the appropriate power output

## Intervention Type

Other

## **Phase**

Not Applicable

## **Primary outcome measure**

1. Visual Analogue Scale (VAS) score, measured at baseline, days 3, 7, 14, 30 and 60, 6 months and 1 year
2. Flare pain per day during days 3, 7, 14, 30, 60 and at 6 months
3. Neurometer CPT/C (Neurotron, Inc) to measure three fiber function
4. SF-36 at baseline, 2 months, 6 months and 1 year following-up

## **Secondary outcome measures**

1. Need to PRF again or other invasive operation at 2 day, 6 month or 1 year following-up
2. Dosage of rescue drug consumed per week at the end of treatment and after 4 weeks follow-up - including Tramadol and/or acetaminophen - and the dosage of combined drug, anti-depressive drug (amitriptyline)
3. Presence, frequency and duration of adverse effects at 7, 14, 30, and 60 days

## **Overall study start date**

22/02/2008

## **Completion date**

28/05/2011

# **Eligibility**

## **Key inclusion criteria**

1. Age greater than 60 years
2. PHN history is longer than 3 months
3. Pain on Visual Analogue Scale (VAS) >3 (0-10 VAS scale)
4. PHN affected nerve sectors were thoracic nerves from T1 to T12 level
5. Refractory to formal treatment such as antiepileptic medicine, antidepressants, opioids and physical treatments and epidural block

## **Participant type(s)**

Patient

## **Age group**

Senior

## **Sex**

Both

## **Target number of participants**

96

## **Key exclusion criteria**

1. Exclusion criteria included withdraws from the study
2. Poor effect, intolerant to the study

3. Uncooperative and unable to finish the self evaluation (VAS, QOL and SF-36)
4. Coagulation disturbances
5. Allergies to local anaesthetic
6. Malignancy

**Date of first enrolment**

22/02/2008

**Date of final enrolment**

28/05/2011

## Locations

**Countries of recruitment**

China

**Study participating centre**

Department of Anesthesiology

Shanghai

China

200092

## Sponsor information

**Organisation**

Xinhua Hospital (China)

**Sponsor details**

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**Sponsor type**

Hospital/treatment centre

**ROR**

<https://ror.org/04dzvks42>

## Funder(s)

**Funder type**  
Government

**Funder Name**  
Shanghai Education Funding Committee (China)

## Results and Publications

**Publication and dissemination plan**  
Not provided at time of registration

**Intention to publish date**

**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?
<a href="#">Results article</a>	results	01/01/2013		Yes	No