

# External peripheral neuromodulation for the relief of chronic pain

|                                        |                                                      |                                                      |
|----------------------------------------|------------------------------------------------------|------------------------------------------------------|
| <b>Submission date</b><br>05/08/2009   | <b>Recruitment status</b><br>No longer recruiting    | <input type="checkbox"/> Prospectively registered    |
|                                        |                                                      | <input type="checkbox"/> Protocol                    |
| <b>Registration date</b><br>18/02/2010 | <b>Overall study status</b><br>Completed             | <input type="checkbox"/> Statistical analysis plan   |
|                                        |                                                      | <input type="checkbox"/> Results                     |
| <b>Last Edited</b><br>18/07/2016       | <b>Condition category</b><br>Nervous System Diseases | <input type="checkbox"/> Individual participant data |
|                                        |                                                      | <input type="checkbox"/> Record updated in last year |

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

## Contact information

**Type(s)**  
Scientific

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## Additional identifiers

**Protocol serial number**  
RJ1 09/N084

## Study information

**Scientific Title**  
A randomised controlled feasibility trial of external peripheral neuromodulation in the treatment of intractable localised chronic neuropathic pain

**Study objectives**

The study hypothesis is that, when given over three treatment sessions at weekly intervals, external peripheral neuromodulation will reduce pain severity at 7 days after the final treatment in patients with intractable localised chronic pain with predominantly neuropathic features.

**Ethics approval required**

Old ethics approval format

**Ethics approval(s)**

Guy's Research Ethics Committee, 22/04/2009, ref: 09-H0804-46

**Primary study design**

Interventional

**Study design**

Single centre double-blind randomised controlled trial

**Study type(s)**

Treatment

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

Chronic neuropathic pain

**Interventions**

Three 5-minute treatment sessions of external peripheral neuromodulation at 2 Hz (or sham stimulation) at weekly intervals. Follow-up to 7 days after the last session, i.e. 21 days.

**Intervention Type**

Other

**Phase**

Not Applicable

**Primary outcome(s)**

Visual Analogue Score (VAS) of pain severity one week following third (final) neuromodulation session.

**Key secondary outcome(s)**

1. VAS of pain severity immediately after treatment and at 7 day intervals to end of study (i.e., days 7, 14 and 21)
2. VAS of pain severity at shorter intervals of less than a week
3. Numerical rating scores (NRS) of:
  - 3.1. Sleep quality
  - 3.2. Functional impact
  - 3.3. Emotional impactMeasured at 7 days following third (final) neuromodulation session.
4. Numerical rating scores on Pain Self-Efficacy Questionnaire (PSEQ) at 7 days following third (final) neuromodulation session
5. Changes in medication usage
6. Change in size of painful area on pain/paraesthesiae map

**Completion date**

16/08/2010

## Eligibility

### Key inclusion criteria

1. Patient age is 18 years or older, either sex
2. Patient has chronic neuropathic (or predominantly neuropathic) intractable pain
3. Patient has an area of pain with a typical dermatomal distribution that can be expected to be covered with a single episode of local stimulation
5. In the opinion of the Investigator and the patient's consultant, all standard medical options have been tried without sufficient improvement in pain control (including opioids, nerve blocks, etc.)
6. Patient has a Visual Analogue Scale (VAS) pain score of 5 cm (or greater) on a 10 cm line

### Participant type(s)

Patient

### Healthy volunteers allowed

No

### Age group

Adult

### Lower age limit

18 Years

### Sex

All

### Key exclusion criteria

1. Patient has a history of substance abuse or substance dependency in the past 6 months prior to baseline data collection
2. Patient is currently participating in another clinical study
3. Patient lacks capacity for informed consent to the trial in the view of person taking consent and/or investigators
4. Pregnancy - if the painful area lies within 50 cm of the gravid uterus
5. Patient has difficulties in adequate understanding of English for consent, clinical review and self-completion questionnaires
6. Patient does not permit notification to General Practitioner of enrolment in the study
7. Patient has previous experience of peripheral neuromodulation. Note that prior transcutaneous electrical nerve stimulation (TENS) experience is permitted.

### Date of first enrolment

17/08/2009

### Date of final enrolment

16/08/2010

## Locations

## **Countries of recruitment**

United Kingdom

England

## **Study participating centre**

**Pain Management & Neuromodulation Centre**

London

United Kingdom

SE1 7EH

## **Sponsor information**

### **Organisation**

Guy's and St Thomas' NHS Foundation Trust (UK)

### **ROR**

<https://ror.org/00j161312>

## **Funder(s)**

### **Funder type**

Government

### **Funder Name**

Guy's and St Thomas' NHS Foundation Trust (UK)

## **Results and Publications**

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

### **IPD sharing plan summary**

Not provided at time of registration