

# The effect of spinal cord stimulation (SCS) on allodynia in patients with neuropathic pain

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<b>Registration date</b> 30/09/2004	<b>Overall study status</b> Completed	<input type="checkbox"/> Statistical analysis plan <input type="checkbox"/> Results
<b>Last Edited</b> 17/04/2015	<b>Condition category</b> Signs and Symptoms	<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

**Contact name**  
Dr Turo Nurmikko

**Contact details**  
The Walton Centre for Neurology and Neurosurgery  
Lower Lane  
Fazakerley  
Liverpool  
United Kingdom  
L9 7LJ

## Additional identifiers

EudraCT/CTIS number

IRAS number

ClinicalTrials.gov number

**Secondary identifying numbers**  
N0259139017

## Study information

**Scientific Title**

The effect of spinal cord stimulation (SCS) on allodynia in patients with neuropathic pain

**Study objectives**

This study is designed to answer this research question: does spinal cord stimulation (SCS) reduce the intensity and area of mechanical and thermal allodynia in patients with neuropathic pain? It is a single-centre study, involving 25 patients, with neuropathic pain, of peripheral origin, and associated with mechanical and thermal allodynia (touch and heat/cold induced pain, respectively). While SCS is considered standard treatment for refractory neuropathic pain, only a few controlled studies have been published on its efficacy, and none systematically assessing allodynia. Our aim is to select patients with mechanical allodynia (most of whom have cold allodynia as well) and measure allodynia before, during and after stimulation to study this aspect further.

**Ethics approval required**

Old ethics approval format

**Ethics approval(s)**

Not provided at time of registration

**Study design**

Randomised controlled trial

**Primary study design**

Interventional

**Secondary study design**

Randomised controlled trial

**Study setting(s)**

Not specified

**Study type(s)**

Treatment

**Participant information sheet****Health condition(s) or problem(s) studied**

Signs and Symptoms: Allodynia

**Interventions**

We will recruit 25 patients with mechanical allodynia and neuropathic pain for this study. Patients are those in whom the clinical decision has been made either to (a) carry out a trial SCS, or (b) implant a permanent stimulator after the trial has been successful. In all these cases, due to clinical situation and routine testing, patients will spend some time without stimulation. We use this opportunity to compare the effect of stimulation on allodynia and pain in these patients. Measurements for intensity and area allodynia (using a brush, a 16 g or 26 g von Frey filament, thermal rollers and thermal stimulator applied to the skin) will be carried out with the stimulator ON and OFF. The level of pain during the two phases will be recorded as well. The

patient will attend twice, once when on arrival the stimulator is switched off and a second time when on arrival the stimulator is switched on. The order of ON and OFF will be randomised, and allodynia's always tested during both ON and OFF periods.

**Intervention Type**

Other

**Phase**

Not Specified

**Primary outcome measure**

Not provided at time of registration

**Secondary outcome measures**

Not provided at time of registration

**Overall study start date**

01/04/2004

**Completion date**

01/03/2005

**Eligibility****Key inclusion criteria**

Not provided at time of registration

**Participant type(s)**

Patient

**Age group**

Not Specified

**Sex**

Not Specified

**Target number of participants**

25

**Key exclusion criteria**

Not provided at time of registration

**Date of first enrolment**

01/04/2004

**Date of final enrolment**

01/03/2005

**Locations**

**Countries of recruitment**

England

United Kingdom

**Study participating centre**

**The Walton Centre for Neurology and Neurosurgery**

Liverpool

United Kingdom

L9 7LJ

## **Sponsor information**

**Organisation**

Department of Health

**Sponsor details**

Richmond House

79 Whitehall

London

United Kingdom

SW1A 2NL

**Sponsor type**

Government

**Website**

<http://www.dh.gov.uk/Home/fs/en>

## **Funder(s)**

**Funder type**

Government

**Funder Name**

The Walton Centre for Neurology and Neurosurgery NHS Trust (UK)

## **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