# Spinal cord stimulation for the treatment of central pain in Multiple Sclerosis

Submission date	Recruitment status	Prospectively registered
23/04/2010	No longer recruiting	Protocol
Registration date	Overall study status	Statistical analysis plan
23/04/2010	Completed	Results
Last Edited	Condition category	Individual participant data
24/01/2018	Nervous System Diseases	<ul><li>Record updated in last year</li></ul>

#### Plain English summary of protocol

Not provided at time of registration

# **Contact information**

#### Type(s)

Scientific

#### Contact name

Ms K Maciver

#### Contact details

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### Additional identifiers

Protocol serial number 4891

## Study information

#### Scientific Title

Comparison of spinal cord stimulation and the clinical and quantitative sensory testing response in patients with MS pain versus patients with peripheral nerve injury pain

#### **Study objectives**

We are measuring the effect of spinal cord stimulation on central pain in Multiple Sclerosis (MS), comparing the clinical and Quantitative Sensory Testing response in patients with MS pain and those with peripheral nerve injury pain. We hypothesise that MS pain patients will have a different sensory profile to peripheral nerve injury pain patients. We also hypothesise that spinal cord stimulation will benefit most of the peripheral nerve injury patients and some of the MS pain patients. We are collecting Quantitative Sensory Testing measurements from an age- and gender-matched group of healthy volunteers.

#### Ethics approval required

Old ethics approval format

#### Ethics approval(s)

South Sefton LREC, 08/08/2008, ref: 08/H1001/103

#### Study design

Non-randomised interventional treatment trial

#### Primary study design

Interventional

#### Study type(s)

Treatment

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

Topic: Neurological; Subtopic: Neurological (all Subtopics); Disease: Nervous system disorders

#### **Interventions**

Trial of spinal cord stimulation. A temporary electrode is inserted into the eipdural space and attached to an external radiofrequency transmitter, which when switched on gives a pleasant paraesthesia in the area of pain. This stimulator remains in situ for 7 days. Pain diaries are kept throughout the trial and Quantitative Sensory Testing is completed once with stimulation and once without, with the tester blinded.

Follow up length: 2 months

#### Intervention Type

Other

#### Phase

**Not Specified** 

#### Primary outcome(s)

Changes in pain scores measured by daily pain diaries, measured on day 7 of the trial

#### Key secondary outcome(s))

Comparison of QST measurements in MS patients with and without stimulation, measured on day 5 of the trial, when the second sensory testing is complete

#### Completion date

30/06/2010

# **Eligibility**

#### Key inclusion criteria

- 1. Group 1: Confirmed MS with central pain
- 2. Group 2: Peripheral nerve injury pain
- 3. Both groups eligible for spinal cord stimulation
- 4. Group 3: Age- and gender-matched healthy controls
- 5. Male and female, aged 18 years or older

#### Participant type(s)

**Patient** 

#### Healthy volunteers allowed

No

#### Age group

Adult

#### Lower age limit

18 years

#### Sex

All

#### Key exclusion criteria

- 1. Unsuitable for spinal cord stimulation
- 2. High intake of opiates
- 3. High levels of psychological distress

#### Date of first enrolment

01/07/2008

#### Date of final enrolment

30/06/2010

#### Locations

#### Countries of recruitment

**United Kingdom** 

England

# Study participating centre Pain Research Institute

Liverpool United Kingdom L9 7AL

# Sponsor information

#### Organisation

Walton Centre for Neurology and Neurosurgery (UK)

#### **ROR**

https://ror.org/05cvxat96

# Funder(s)

#### Funder type

Charity

#### **Funder Name**

Multiple Sclerosis Society (UK)

#### Alternative Name(s)

Multiple Sclerosis Society of Great Britain and Northern Ireland, The MS Society, MS Society UK, Multiple Sclerosis Society UK, MS Society

#### **Funding Body Type**

Private sector organisation

#### **Funding Body Subtype**

Associations and societies (private and public)

#### Location

United Kingdom

#### **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? Participant information sheet 11/11/2025 11/11/2025 No

Participant information sheet