

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

<b>Submission date</b> 23/04/2010	<b>Recruitment status</b> No longer recruiting	<input type="checkbox"/> Prospectively registered
<b>Registration date</b> 23/04/2010	<b>Overall study status</b> Completed	<input type="checkbox"/> Protocol
<b>Last Edited</b> 24/01/2018	<b>Condition category</b> Nervous System Diseases	<input type="checkbox"/> Statistical analysis plan
		<input type="checkbox"/> Results
		<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**  
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 epidural 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)

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