NErve Rootblock VErsus Surgery: NERVES

Submission date 03/06/2014	Recruitment status No longer recruiting
Registration date 05/06/2014	Overall study status Completed
Last Edited 11/05/2021	Condition category Musculoskeletal Diseases

- [X] Prospectively registered
- [X] Protocol
- [] Statistical analysis plan
- [X] Results
- [] Individual participant data

Plain English summary of protocol

Background and study aims

We are carrying out a study of about 200 patients suffering from sciatica resulting from a prolapsed (slipped) disc. The aim is to establish if local anaesthetic and steroid injection (TFESI) administered accurately to the source of radicular leg pain can provide a faster, cheaper and more effective treatment for patients with persistent sciatica than an invasive surgical procedure (microdiscectomy). The studys findings should help advise clinicians on which treatment type may bring the most benefit to patients.

Who can participate?

Patients aged 16 or over with recently diagnosed sciatica secondary to a prolapsed disc with symptoms of between 6 weeks and 12 months in duration.

What does the study involve?

The trial will be run in out-patient NHS neurosurgical, pain and orthopaedic clinics. Patients who would like to take part will be allocated to either the epidural steroid injection or microdiscectomy by a process called randomisation with an aim for a 50/50 split of each treatment. The treatment will take place between 4-6 weeks after randomisation. 3 months after treatment the patient will be asked to complete questionnaires to assess how successful the treatment has been. These questionnaires will be repeated at 6, 9 and 12 months to measure the ongoing results of the treatment options.

What are the possible benefits and risks of participating?

Both of the treatment options offered as part of this trial are currently used by the NHS as treatments for sciatica secondary to a prolapsed disc and are considered effective therapies. There should be benefits to all patients suffering acute radicular leg pain as this should help guide treatment options for these patients in the future. The side effects are those commonly associated with spinal surgery or injection; these are well documented.

Where is the study run from?

The lead centre for NERVES is The Walton Centre for Neurology and Neurosurgery NHS Foundation Trust. It is anticipated that several other specialist centres in Manchester, Cambridge, Glasgow, Preston, Leeds and Middlesborough will also be involved. When is study starting and how long is it expected to run for? January 2015 to July 2019

Who is funding the study? National Institute of Health Research Health Technology Assessment (NIHR HTA)

Who is the main contact? Mr Martin Wilby nerves@liverpool.ac.uk

Study website http://www.nervestrial.org.uk/

Contact information

Type(s) Scientific

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Additional identifiers

EudraCT/CTIS number 2014-002751-25

IRAS number

ClinicalTrials.gov number

Secondary identifying numbers HTA 12/201/10

Study information

Scientific Title

Multi-centre randomised control trial comparing the clinical and cost effectiveness of transforaminal epidural steroid injection to surgical microdiscectomy for the treatment of chronic radicular pain secondary to prolapsed intervertebral disc herniation: Nerve rootblock versus surgery (NERVES)

NERVES

Study objectives

This study is designed to provide an evidence base to potentially inform future treatment of sciatica secondary to prolapsed disc. Transforaminal epidural steroid injection is recognised as a treatment alternative to surgical microdiscectomy, but it is not known how effective and cost effective this treatment is in comparison. This trial will compare the epidural steroid injection and microdiscectomy, and examine the impact of the different treatment modalities on several outcomes such as Oswestry Disability Questionnaire scores, return to work, and other health economic analyses.

Ethics approval required

Old ethics approval format

Ethics approval(s)

NRES Committee North West – Liverpool Central, 08/10/2014, ref: 14/NW/1219

Study design

Open labelled 2-arm randomised controlled trial with an inbuilt pilot study

Primary study design

Secondary study design Randomised controlled trial

Study setting(s) Hospital

Study type(s) Treatment

Participant information sheet

Not available in web format, please use the contact details to request a patient information sheet

Health condition(s) or problem(s) studied

Acute sciatica secondary to prolapsed intervertebral disc

Interventions

The technologies to be compared are: 1. Fluoroscopically guided trans-foraminal epidural steroid injection (TFESI) of a standard combination of local anaesthetic and steroid drug and 2. Standard surgical lumbar microdiscectomy

Intervention Type

Procedure/Surgery

Primary outcome measure

Pilot Study (recruitment from 2 sites for 6 months): Predicted full trial recruitment period <18 months and consent rate >40%

Full study:

Oswestry Disability Questionnaire (ODQ; a condition specific outcome measure with over 30 years of scientific validation) at 3 months post-intervention

Secondary outcome measures

- 1. ODQ at 6 months post intervention
- 2. ODQ at 9 months post intervention
- 3. ODQ at 12 months post intervention
- 4. Visual analogue pain scores for leg and back pain
- 5. Likert Scale
- 6. Modified Roland-Morris outcome scale for sciatica
- 7. Core Outcome Measures Index (COMI)
- 8. Work status (return to work)

9. QOL

10. Health economic outcomes expressed as the incremental cost per quality-adjusted life-year (QALY)

Overall study start date

17/07/2014

Completion date

09/07/2019

Eligibility

Key inclusion criteria

As of 19/05/2016:

- 1. Diagnosed lower extremity radiculopathy (sciatica)
- 2. Sciatica secondary to prolapsed intervertebral disc (PID) (proven on MRI)
- 3. Duration of symptoms between 6 weeks and 12 months

- 4. Leg pain non-responsive to conservative, non-invasive management
- 5. Age 16 65 years

6. Patient has attempted at least one form of conservative (non-operative) treatment* but this has not provided adequate relief of patient's pain/symptoms

7. Patient willing and able to give consent

*including but not limited to; medication, physiotherapy, modification of daily activities

Previous inclusion criteria:

- 1. Newly diagnosed disabling sciatica secondary to prolapsed intervertebral disc (proven on MRI)
- 2. Duration of symptoms between 6 weeks and 6 months
- 3. Failed conservative, non-invasive management

4. Age over 16 years

- 5. Diagnosed with lower extremity radiculopathy (sciatica) secondary to a lumbar disc herniation
- 6. Medication has not been helpful in treating the patient's pain/symptoms
- 7. Modification of daily activities has not been helpful in treating the patient's pain/symptoms
- 8. Physiotherapy has not been helpful in treating the patient's pain/symptoms
- 9. Patient willing to give consent

Participant type(s)

Patient

Age group

Adult

Sex

Both

Target number of participants

148 (updated 06/04/2020, previously 200)

Total final enrolment

163

Key exclusion criteria

As of 19/05/2016:

- 1. Serious neurological deficit (e.g. foot-drop/possible cauda-equina compression)
- 2. Previous spinal surgery at the same intervertebral disc (level)
- 3. Sciatica presentation for longer than 12 months
- 4. Age < 16
- 5. Age > 65
- 6. Patient has not attempted any form of conservative treatment
- 7. Any patient who has a contraindication for surgery and/or injection
- 8. Patient known to be pregnant

Previous exclusion criteria:

- 1. Neurological deficit (foot-drop/possible cauda-equina compression)
- 2. Previous surgery at that level
- 3. Age: < 16

4. Any patient who has not attempted conservative non-operative treatment for a minimum of 6 weeks

5. Any patient who has a contraindication for surgery6. Any patient who is pregnant

Date of first enrolment 17/07/2014

Date of final enrolment 31/12/2017

Locations

Countries of recruitment England

United Kingdom

Study participating centre The Walton Centre NHS Foundation Trust Liverpool United Kingdom L9 7LJ

Sponsor information

Organisation The Walton Centre NHS Foundation Trust (UK)

Sponsor details c/o Gillian Hamblin The Walton Centre NHS Foundation Trust Lower Lane Fazakerley Liverpool England United Kingdom L9 7LJ +44(0)151 556 3389 Gillian.Hamblin@thewaltoncentre.nhs.uk

Sponsor type Hospital/treatment centre

Website http://www.thewaltoncentre.nhs.uk ROR https://ror.org/05cvxat96

Funder(s)

Funder type Government

Funder Name Health Technology Assessment Programme

Alternative Name(s) NIHR Health Technology Assessment Programme, HTA

Funding Body Type Government organisation

Funding Body Subtype National government

Location United Kingdom

Results and Publications

Publication and dissemination plan Not provided at time of registration

Intention to publish date 30/11/2020

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?
Protocol article	protocol	05/09/2018		Yes	No
Results article		01/04/2021	14/04/2021	Yes	No
<u>Results article</u>		18/03/2021	11/05/2021	Yes	No
HRA research summary			28/06/2023	No	No