# Transforaminal epidural corticosteroïds versus shortacting anesthetic in patients with sciatica: a randomized prospective trial

Published: 20-08-2015 Last updated: 13-04-2024

The goal is to find answer to the question: do epidural injections with corticosteroids in patients with sciatica have a positive effect on pain, absenteeism from work and number of operations compared to standard care (pain medication only).

Ethical review Approved WMO

**Status** Recruitment stopped

**Health condition type** Spinal cord and nerve root disorders

**Study type** Interventional

## **Summary**

#### ID

NL-OMON41491

#### **Source**

ToetsingOnline

#### **Brief title**

Epidural corticosteroids in the treatment of sciatica

## **Condition**

• Spinal cord and nerve root disorders

#### Synonym

radicular syndrome of lower limbs, sciatica

### Research involving

Human

## **Sponsors and support**

**Primary sponsor:** Sint Lucas Andreas Ziekenhuis

1 - Transforaminal epidural corticosteroïds versus shortacting anesthetic in patien ... 13-05-2025

Source(s) of monetary or material Support: Ministerie van OC&W
Intervention
Keyword: cost effectiveness, pain management, sciatica, steroid injections
Outcome measures
Primary outcome
Primary outcome measures:
1. Roland Disability Questionaire
2. Visual Analogue Scale (VAS) for back pain
3. Visual Analogue Scale (VAS) for leg pain
4. Global Perceived effect
Secondary outcome
Secondary outomce measures:
1. satisfaction
2. use of medication
2. d3c of medication
3. absenteism from work (yes- no)
3. absenteisiii itoiti work (yes- no)

# **Study description**

## **Background summary**

Sciatica is characterized by radiating pain in an area of the leg typically served by one nerve root in the lumbar or sacral spine/. The most common cause of sciatica is a herniated disk. The estimated annual incidence of sciatica in The Netherlands is 9 cases per 1000 adults (95%BI 8,4-10,2).

The natural history of sciatica is favorable, with resolution of leg pain within 2-3 months from onset in the majority of patients. The international consensus has been that surgery should be offered only if symptoms persist after a period of conservative treatment. Exceptions are patients with severe pain refractory to medication or patients with neurological deficits (cauda equine syndrome, weakness MRC gr 3 or more). These patients are operated regardless of the duration of symptoms.

There are several non-surgical treatment options in patients with sciatica including pain medication, physiotherapy or epidural injections with corticosteroids. The latter is performed by an anesthesiologist under radiological guidance. In the national Dutch treatment guideline for sciatica (2008) the injections are recommended if pain medication fails.

What is meant by \*failing\*? It\*s not always clear when to refer patients for an injection. Many Hospitals in The Netherlands have their own Pain Department where injections are carried out easily, without different forms of pain medication having been tried. This asks for new research: what is the role of epidural injections with steroids within the treatment protocol for sciatica?

## Study objective

The goal is to find answer to the question: do epidural injections with corticosteroids in patients with sciatica have a positive effect on pain, absenteeism from work and number of operations compared to standard care (pain medication only).

## Study design

a partly blinded\*, randomized, controlled trial.

There are 3 groups:

- 1) pain medication only
- 2) pain medication + epidural injection with corticosteroids and local anesthetic
- 3) pain medication + epidural injection with local aneshetic
- \* partly blinded refers to: patients and investigators of course know when they are injected. The injected substance is unknown however.

#### Intervention

Intervention group 1:

transforaminal epidural injection with 60 mg Depomedrol and 1,5 ml Levobupivacaine. The injection is given under radiological guidance with administration of contrast agent.

Intervention group 2:

transforaminal epidural injection with 1,5 ml Levobupivacaine only. The injection is given under radiological guidance with administration of contrast agent.

## Study burden and risks

For all 3 groups:

4 visits to hospital (20 mins max.) During each visit questionnaires are filled in.

For the injected groups there minor risks related to the injections: temporary headache, infection (rare). The risks of radiogical procedures and contrast fluid are negliglible.

## **Contacts**

#### **Public**

Sint Lucas Andreas Ziekenhuis

Jan Tooropstraat 164 Amsterdam 1061 AE NL

#### **Scientific**

Sint Lucas Andreas Ziekenhuis

Jan Tooropstraat 164 Amsterdam 1061 AE NL

# **Trial sites**

## **Listed location countries**

**Netherlands** 

# **Eligibility criteria**

## Age

Adults (18-64 years) Elderly (65 years and older)

## **Inclusion criteria**

18- 65 years old; sciatica; 8 weeks; radiologically confirmed discus; correlation between symptoms and MRI abnormalities; VAS 40 or more despite NSAIDs, PCM, of opioids

## **Exclusion criteria**

paresis MRC gr 3 or more, caudasyndrome; spinal surgery at the same level within 1 year ; lumbar stenosis, spondylolistesis; pregnancy; severe co morbidity (for example cancer)

# Study design

## **Design**

Study type: Interventional

Intervention model: Parallel

Allocation: Randomized controlled trial

Masking: Double blinded (masking used)

Control: Active

Primary purpose: Treatment

## Recruitment

NL

Recruitment status: Recruitment stopped

Start date (anticipated): 13-01-2016

Enrollment: 260

Type: Actual

## Medical products/devices used

Product type: Medicine

Brand name: Chirocaine

Generic name: Levobupivacaine

Registration: Yes - NL intended use

Product type: Medicine

Brand name: Depomedrole

Generic name: methylprednisolon acetate

Registration: Yes - NL intended use

## **Ethics review**

Approved WMO

Date: 20-08-2015

Application type: First submission

Review commission: MEC-U: Medical Research Ethics Committees United

(Nieuwegein)

Approved WMO

Date: 08-04-2016

Application type: Amendment

Review commission: MEC-U: Medical Research Ethics Committees United

(Nieuwegein)

# **Study registrations**

## Followed up by the following (possibly more current) registration

No registrations found.

# Other (possibly less up-to-date) registrations in this register

No registrations found.

## In other registers

Register ID

EudraCT EUCTR2014-003096-37-NL

CCMO NL45805.100.15