

# The clinical efficacy of a continuous psoas compartment - sciatic nerve block in patients undergoing a total hip arthroplasty.

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The aim of the present, observational, descriptive, pilot study is the clinical efficacy (expressed in pain scores, sensory and motor blockades) of continuous PCSNB analysis in which patients undergo a total hip prosthesis.

<b>Ethical review</b>	Approved WMO
<b>Status</b>	Recruitment stopped
<b>Health condition type</b>	Joint disorders
<b>Study type</b>	Interventional

## Summary

### ID

NL-OMON35115

### Source

ToetsingOnline

### Brief title

CPCSNB and clinical efficacy.

### Condition

- Joint disorders

### Synonym

total hip arthroplasty and peripheral nerve block

### Research involving

Human

### Sponsors and support

**Primary sponsor:** De Heel - Zaans Medisch Centrum

**Source(s) of monetary or material Support:** Ministerie van OC&W

## Intervention

**Keyword:** levobupivacaine, psoas compartment block, sciatic nerve block, total hip arthroplasty

## Outcome measures

### Primary outcome

Pain scores (Numeric Rating Scale, whereby 0= no pain and 10=worst pain imaginable).

### Secondary outcome

Sensory block (number of dermatomes with a loss of cold sensation tested by application of a ice-cube).

Motor block: Bromage Scale (0=no block, 3 = total block).

Opioids consumption via the Patient Controlled Analgesia pump. (mg morphine/day)

Patient satisfaction: Numerieke Rating Scale of satisfaction.

## Study description

### Background summary

A psoas compartment - sciatic nerve block (psoas compartment - sciatic nerve block = PCSNB) is a widely used proximal peripheral nerve block in orthopedic surgery at the lower extremity. Particularly in the proximal lower extremity surgery, including hip surgery, this technique can be of great value as part of postoperative pain management strategy. Recently, the clinical efficacy of a single-injection PCSNB with long-acting local anesthetics in patients undergoing total hip prosthesis had been analyzed. One of the conclusions from

this study was a modification of this single - injection PCSNB was desirable given the fact that the sensory blockade is not the whole wound area belonging to the total hip prosthesis covered. According to this modification, the authors suggested a continue PCSNB, itt analyzed, single-injection, technique for this kind of surgery. This continuous PCSNB, where there is a catheter is left in the vicinity of the plexus lumbosacralis, creates the opportunity for greater local anesthetic volumes per unit time in order to submit a more comprehensive blockade to achieve

## **Study objective**

The aim of the present, observational, descriptive, pilot study is the clinical efficacy (expressed in pain scores, sensory and motor blockades) of continuous PCSNB analysis in which patients undergo a total hip prosthesis.

## **Study design**

observational, intervention study without invasive postoperative measurements.

## **Intervention**

Psoas Compartment - Sciatic nerve block.

## **Study burden and risks**

Risk: very low, the risks associated with the continuous peripheral nerve blockades.

Tax: very low, being non-invasive, postoperative testing.

Study outcomes are very valuable concerning clinical efficacy assessment.

## **Contacts**

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## Trial sites

### Listed location countries

Netherlands

## Eligibility criteria

### Age

Adults (18-64 years)

Elderly (65 years and older)

### Inclusion criteria

patients undergoing total hip arthroplasty under spinal anesthesia

ASA I-II (American Society of Anesthesiologists class I-II)

age > 18 years

### Exclusion criteria

contra indications for peripheral nerve blocks (coagulopathies, infection at puncture site, allergy for local anesthetics).

allergy to contrast agents.

patients not being able to proper communication (dementia)

## Study design

### Design

**Study type:** Interventional

Masking:

Open (masking not used)

Control:

Uncontrolled

Primary purpose:

Treatment

## Recruitment

NL  
Recruitment status: Recruitment stopped  
Start date (anticipated): 01-04-2010  
Enrollment: 10  
Type: Anticipated

## Ethics review

Approved WMO  
Date: 20-08-2010  
Application type: First submission  
Review commission: METC Noord-Holland (Alkmaar)

## 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
CCMO	NL31850.094.10