

# Remote ischemic preconditioning for pain management in labour: a randomized controlled pilot study.

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Reduce the need for other analgesia after RIPC by investigating the efficacy of remote ischemic preconditioning on pain during labour.

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

## Summary

### ID

NL-OMON45643

### Source

ToetsingOnline

### Brief title

Remote ischemic Preconditioning and labour pain

### Condition

- Other condition
- Pregnancy, labour, delivery and postpartum conditions

### Synonym

labour pain

### Health condition

pijn

### Research involving

Human

## Sponsors and support

**Primary sponsor:** Anesthesiologie

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

## Intervention

**Keyword:** Labour, Pain, RIPC

## Outcome measures

### Primary outcome

The time between the intervention and the need for any (other) analgesia.

### Secondary outcome

- Women with 30% or more pain relief after 10 minutes, 30 minutes, one hour and then every hour after treatment
- NRS scores and analgesic needs
- Rate of assisted vaginal birth
- Rate of caesarean section
- Apgar score
- Significant maternal morbidity; major postpartum haemorrhage, uterine rupture, admission to an ICU, eclampsia or severe HELLP
- Adverse and serious adverse events

## Study description

### Background summary

Remote ischemic preconditioning as a non-invasive, non-pharmacological method for pain relief during labour.

### Study objective

Reduce the need for other analgesia after RIPC by investigating the efficacy of remote ischemic preconditioning on pain during labour.

## Study design

Randomized, single blinded, placebo controlled, pilot intervention study

## Intervention

Randomization creates 2 groups. One group will undergo 3 cycles of ischemia for 5 minutes (50 mmHg above own systolic blood pressure) followed by 5 minutes of reperfusion. In the other group the tourniquet pressure is 20 mmHg with the same 3 cycles and this is the control group.

## Study burden and risks

Participation involves 3 times 5 minutes of tourniquet pressure. There is no risk associated with participation. Registration of NRS scores is routine practice in accordance with the VMS-criteria. Women are free to ask for regular analgesics for pain management.

## Contacts

### Public

Selecteer

Philips van Leydenlaan 25  
Nijmegen 6525 EX  
NL

### Scientific

Selecteer

Philips van Leydenlaan 25  
Nijmegen 6525 EX  
NL

## Trial sites

### Listed location countries

Netherlands

## Eligibility criteria

### Age

Adults (18-64 years)

Elderly (65 years and older)

### Inclusion criteria

- Woman at 37-42 gestational weeks
- Aged > 18 years

### Exclusion criteria

- Analgesics before study
- Raynaud phenomenon
- Post-traumatic lengthy hand reconstruction on both upper extremities
- Severe crushing injuries on both upper extremities
- Skin grafts on both upper extremities
- Patients with advice for epidural analgesia
- Patient with contraindications for epidural analgesia
- Obstetrical complications such as:
  - o Intrauterine fetal death
  - o Obstetric high care patient
  - o Bleeding disorders
  - o Thrombosis disorders

## Study design

### Design

Study phase:	2
Study type:	Interventional
Intervention model:	Parallel
Allocation:	Randomized controlled trial
Masking:	Single blinded (masking used)

**Primary purpose:** Treatment

## Recruitment

NL  
Recruitment status: Recruitment stopped  
Start date (anticipated): 23-08-2018  
Enrollment: 40  
Type: Actual

## Medical products/devices used

Generic name: Pneumatic tourniquet  
Registration: Yes - CE intended use

## Ethics review

Approved WMO  
Date: 26-09-2017  
Application type: First submission  
Review commission: CMO regio Arnhem-Nijmegen (Nijmegen)

## Study registrations

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

No registrations found.

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

ID: 21798  
Source: NTR  
Title:

### In other registers

Register	ID
CCMO	NL61233.091.17
OMON	NL-OMON21798