# The difference between the documented and perceived adherence to the pain management protocol in patients undergoing lower limb amputation

Submission date	Recruitment status	<ul><li>Prospectively registered</li></ul>
17/01/2021	No longer recruiting	☐ Protocol
Registration date	Overall study status	Statistical analysis plan
09/02/2021	Completed	Results
<b>Last Edited</b> 05/04/2022  Condition cated Surgery	Condition category	Individual participant data
	• •	[] Record updated in last year

## Plain English summary of protocol

Background and study aims

In the Netherlands, approximately 3,300 lower limb amputations are performed annually. An amputation is a major intervention, which is associated with severe postoperative pain. Chronic postsurgical pain is only partly understood, difficult to treat and the effectiveness of treatment is limited. The severity and duration acute postoperative pain is associated with the risk of chronic pain. Preventive treatment should take place in the preoperative, intraoperative and in the first week of the postoperative phase with the aim of preventing long-term sensitization of the spine by blocking or modulating the nociceptive input after peripheral nerve damage. A perioperative pain management protocol for amputation has been introduced in the UMCG. This protocol describes the items and associated interventions of pain management that should be performed during the perioperative period of amputation. This protocol should be followed unless there are contra-indications in specific parts of the protocol.

The study aims to discover how this protocol was followed by patients.

#### Who can participate?

Patients who underwent amputation of the lower limb at the University Medical Center Groningen (Netherlands) (June 28, 2017 - February 1, 2020)

## What does the study involve?

All patient records were analyzed to determine adherence to the perioperative pain management protocol (PPMP). To identify the perceived adherence to the PPMP a survey was also conducted among involved physicians.

What are the possible benefits and risks of participating? None

Where is the study run from?
University Medical Center Groningen (Netherlands)

When is the study starting and how long is it expected to run for? December 2019 to October 2020

Who is funding the study?
University Medical Center Groningen (Netherlands)

Who is the main contact? Prof André P. Wolff, a.p.wolff@umcg.nl

## Contact information

## Type(s)

Public

#### Contact name

Prof André P. Wolff

#### **ORCID ID**

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#### Contact details

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# Additional identifiers

## EudraCT/CTIS number

Nil known

#### IRAS number

## ClinicalTrials.gov number

Nil known

## Secondary identifying numbers

201900820

# Study information

#### Scientific Title

Discrepancy between the documented and perceived adherence to the perioperative pain management protocol in patients undergoing lower limb amputation. A retrospective observational study

## **Study objectives**

The adherence to the perioperative pain management protocol in patients who underwent a lower limb amputation is high

## Ethics approval required

Old ethics approval format

## Ethics approval(s)

Approved 10/12/2019, University Medical Center Groningen Institutional Review Board (PO Box 30 001, 9700 RB, Groningen, The Netherlands; +31 503614204; metc@umcg.nl), ref: METc 201900820

## Study design

Retrospecitve observational study

## Primary study design

Observational

## Secondary study design

Case-control study

### Study setting(s)

Hospital

## Study type(s)

Other

## Participant information sheet

No participant information sheet available (retrospective study)

## Health condition(s) or problem(s) studied

Patients who underwent a lower limb amputation

#### **Interventions**

Between June 1, 2017 and February 29, 2020, 153 lower limb amputations were performed. All patient records were analyzed retrospectively to determine the documented adherence to the perioperative pain management protocol (PPMP). To identify the perceived adherence to the PPMP a survey was also conducted among involved physicians.

## Intervention Type

Other

## Primary outcome measure

- 1. Documented adherence by patients to the perioperative pain management protocol measured from patient records by the researchers using a newly developed set of 11 adherence criterias at a single time point
- 2. Perceived adherence by physicians to the perioperative pain management protocol measured using a newly developed questionnaire completed by physicians at a single time point

## Secondary outcome measures

Patient characteristics measured using patient records at a single time point:

- 1. Age, sex
- 2. Body mass index (kg/m²)
- 3. Comorbidities
- 4. Date of amputation, indication for amputation, region and level of amputation
- 5. Preoperative pain management, perioperative pain management
- 6. Medication usage
- 7. American Society of Anesthesiologists Physical Status (ASA score)
- 8. Anaesthetic technique, surgical complications
- 9. Length of hospital stay
- 10. 30-day mortality

## Overall study start date

10/12/2019

## Completion date

01/10/2020

# **Eligibility**

#### Key inclusion criteria

- 1. Patients who underwent transfemoral amputation, knee disarticulation, transtibial- and (partial) foot amputations, and whose data were registered in EPIC
- 2. Interns and residents in vascular surgery, vascular surgeons, residents in anaesthesiology and anaesthesiologists involved in the amputation process

## Participant type(s)

Patient

## Age group

Adult

#### Sex

Both

## Target number of participants

123

#### Total final enrolment

123

#### Key exclusion criteria

- 1. Patients younger than 18 years
- 2. Patients who underwent a toe amputation or a stump revision
- 3. Physician is no longer working in the hospital

## Date of first enrolment

01/06/2017

#### Date of final enrolment

## Locations

#### Countries of recruitment

Netherlands

## Study participating centre University Medical Center Groningen

Pain center Location Beatrixoord Dilgtweg 5 Haren Netherlands 9750 RA

# Sponsor information

## Organisation

University Medical Center Groningen

## Sponsor details

Department of Anesthesiology, Pain Center Location Beatrixoord Dilgtweg 5 Groningen Netherlands 9750 RA +31 503612140 a.p.wolff@umcg.nl

### Sponsor type

Hospital/treatment centre

#### Website

http://www.umcg.nl/EN

### **ROR**

https://ror.org/03cv38k47

# Funder(s)

## Funder type

Hospital/treatment centre

#### **Funder Name**

Universitair Medisch Centrum Groningen

## Alternative Name(s)

University Medical Center Groningen, UMCG

## **Funding Body Type**

Government organisation

## **Funding Body Subtype**

Local government

#### Location

Netherlands

## **Results and Publications**

## Publication and dissemination plan

Planned publication in a high-impact peer-reviewed journal.

## Intention to publish date

31/12/2022

## Individual participant data (IPD) sharing plan

The datasets generated during and/or analysed during the current study are available from the corresponding author on reasonable request.

## IPD sharing plan summary

Available on request