# "De invloed van cryotherapie op het postoperatief herstel na een schouderoperatie voor het subacromiaal pijnsyndroom."

No registrations found.

**Ethical review** Positive opinion **Status** Recruiting

Health condition type -

**Study type** Interventional

# **Summary**

## ID

NL-OMON25969

Source

Nationaal Trial Register

**Brief title** 

Cryo-study

## **Health condition**

Postoperative pain and shoulder function after bursectomy for subacromial pain syndrome.

# **Sponsors and support**

Primary sponsor: C.P.J. Visser (CV), M.D., PhD

Orthopaedic Surgeon

Alrijne hospital

Department of Orthopedics

**Source(s) of monetary or material Support:** No financial support from other sources.

#### Intervention

## **Outcome measures**

## **Primary outcome**

The primary study outcome is quality of life reported on the Western Ontario Rotator Cuff index 8 weeks after surgery.

## **Secondary outcome**

Secondary outcomes are VAS for pain in rest, VAS when elevating the arm, Simple Shoulder test, Constant Score, range of motion, use of painkillers and return to work. Additionally, we will daily record pain and use of painkillers until approximately 8 weeks after surgery.

# **Study description**

## **Background summary**

Rationale: Pain and early mobilization are essential factors affecting postoperative recovery after shoulder surgery. In spite of being one of the oldest empirical treatments to relieve pain after (surgical) musculoskeletal trauma, cryotherapy is not universally provided after shoulder

surgery. It is unknown whether postoperative cryotherapy leads to a reduction of experienced

pain, early mobilization and improved quality of life after arthroscopic shoulder surgery.

Objective: To study the effectiveness of postoperative cryotherapy on subjective patientreported

pain and shoulder function in patients operated for subacromial pain syndrome. Study design: Randomized controlled trial, Level of evidence 1b.

Study population: The study population consists 70 patients with subacromial pain syndrome (SAPS) who are treated with an arthroscopic debridement of the bursa. Intervention: 35 patients (intervention group) will be allocated to computer-assisted cryotherapy (Zamar® ZTCube) for 2 to 8 weeks after surgery. 35 patients (control group) will be allocated to receive usual care treatment with 20mL subacromial levobupivacain (5mg/mL, 0,5%, Chirocaine) injection after finishing the surgical procedure.

Main study endpoint: The primary study outcome is quality of life reported on the Western Ontario Rotator Cuff index 8 weeks after surgery. Secondary outcomes are VAS for pain in rest, VAS when elevating the arm, Simple Shoulder test, Constant Score, range of motion, use of painkillers and return to work. Outcomes are obtained at 2 weeks, at 8 weeks, at 3 months and 1 year after surgery. Additionally, we will daily record pain and use of painkillers until approximately 8 weeks after surgery. We will apply mixed models to investigate the

effectiveness of computer-assisted cryotherapy.

## **Study objective**

We hypothesized that computer-assisted cryotherapy leads to a significant reduction of postoperative patient-reported pain and increase in shoulder function in patients operated for patients with SAPS.

## Study design

Outcomes are assessed at baseline, 2 weeks, at 8 weeks, at 3 months and 1 year after surgery.

#### Intervention

35 patients (intervention group) will be allocated to computer-assisted cryotherapy (Zamar® ZTCube) for 2 to 8 weeks after surgery. 35 patients (control group) will be allocated to receive usual care treatment with 20mL subacromial levobupivacain (5mg/mL, 0,5%, Chirocaine) injection after finishing the surgical procedure.

# **Contacts**

#### **Public**

Houtlaan 55

C.P.J. Visser

Alrijne hospital, Department of Orthopedics, route 33

Leiden 2334 CK

The Netherlands

#### Scientific

Houtlaan 55

C.P.J. Visser

Alrijne hospital, Department of Orthopedics, route 33

Leiden 2334 CK

The Netherlands

# **Eligibility criteria**

## Inclusion criteria

SAPS is defined according to the recommendations published in the guidelines for the diagnosis and treatment of SAPS of the Dutch orthopaedic association7. Emphasis is put on a combination of tests to demonstrate SAPS7, 25. The following inclusion criteria are applied:

- Pain localized in the deltoid region
- Complaints for more than 6 months
- Unsuccessful physical therapy for at least six weeks
- Exacerbation of pain when raising the arm
- A positive Neer impingement sign, and an only temporarily effect of ultrasound guided subacromial infiltration (lidocain + corticosteroids).
- A positive Hawkins-Kennedy test
- A painful arc
- Scheduled for arthroscopic bursectomy

## **Exclusion criteria**

- No informed consent is obtained
- Language barrier
- Age <25 years
- Full-thickness rotator cuff tear
- Restriction of passive shoulder motion (i.e. frozen shoulder).
- Glenohumeral osteoarthritis
- Calcifying tendonitis
- History of a neurological disorder (e.g. stroke, Parkinson, dementia)
- Rheumatoid arthritis
- Concomitant biceps tenodesis.
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- Subacromial decompression (Those patients are treated with a pain-buster).
- Clinical signs of cervical radiculopathy.

# Study design

## **Design**

Study type: Interventional

Intervention model: Parallel

Allocation: Randomized controlled trial

Masking: Open (masking not used)

Control: Active

## Recruitment

NL

Recruitment status: Recruiting
Start date (anticipated): 20-04-2017

Enrollment: 70

Type: Anticipated

# **Ethics review**

Positive opinion

Date: 20-04-2017

Application type: First submission

# **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

NTR-new NL6239 NTR-old NTR6419

Other 58789, ABR nummer: P16.212, METC leiden

# **Study results**