# The anterior cutaneus nerve entrapment syndrome (ACNES). Randomized double blind controlled trial for the diagnosis and treatment of entrapment of the anterior cutaneus nerve through the rectus muscle.

Published: 04-09-2008 Last updated: 08-05-2024

Evaluation of the effect ofdiagnostic and therapeutic proces in reducing pain in patients suspected with ACNES.Is injection of lidocaine in patients suspected of ACNES leading to a larger group of people with a clinically relevant reduction of pain...

Ethical reviewApproved WMOStatusRecruitment stoppedHealth condition typePeripheral neuropathies

Study type Interventional

## **Summary**

#### ID

NL-OMON32058

#### **Source**

**ToetsingOnline** 

#### **Brief title**

ACNES the diagnosis and treatment trial

#### **Condition**

- Peripheral neuropathies
- Skin and subcutaneous tissue therapeutic procedures

#### **Synonym**

abdominal wall nerve entrapment, ACNES

#### Research involving

Human

### **Sponsors and support**

Primary sponsor: Máxima Medisch Centrum

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

#### Intervention

**Keyword:** Anterior cutaneus nerve, diagnosis, entrapment, treatment

#### **Outcome measures**

#### **Primary outcome**

The difference in number of patients with a clinically relevant reducion of pain on VAS, 15 min after injection of Lidocain vs saline.

The difference in number of patients with a clinically relevant reducion of pain on VAS after neurectomie vs sham operation.

A more than 50 % reduction on VAS is considered clinically relevant.

#### **Secondary outcome**

Fase 1, Diagnostic

- \* the difference in the number of people with longterm painfree result after diagnostic injection (VAS<10)
- \* the absolute en relative difference on the VAS.
- \* difference on Verbal Rating Score (VRS)

Fase 2 en 3, therapie

\* The number of patients pain free at 3 months after injection of lidocaine and

#### Kenacort

2 - The anterior cutaneus nerve entrapment syndrome (ACNES). Randomized double blind ... 16-06-2025

- \* Long term evaluation: frequency of patients developping a recurrent pain at the site of surgery after a pain free period (VAS < 10) of at least 6 weeks after neurectomy.
- \* Difference on the VRS
- \* difference in improvement on the SF-36

# **Study description**

#### **Background summary**

Entrapment of one or more nerve branches in the rectus abdominis muscle, known as the anterior cutaneus nerve entrapment syndrome (ACNES), can cause abdominal pain and discomfort. It is often overseen as a cause of abdominal pain. Once diagnosed several therapeutic options are available. Our studiegroup propagates neurectomy, dissection of the nerve branches perforating the anterior fascia of the rectus abdominis muscle. In our own experience this leads to succesfully improving complaints in patients in about 75 % of the cases. Pain specialists and non-believers remain critical and doubt the surgical intervention to be usefull for various reasons.

#### Study objective

Evaluation of the effect ofdiagnostic and therapeutic proces in reducing pain in patients suspected with ACNES.

Is injection of lidocaine in patients suspected of ACNES leading to a larger group of people with a clinically relevant reduction of pain compaired to saline? Is neurectomy in patients suspected of ACNES leading to a larger group of people with a clinically relevant reduction of pain compaired to a 'sham' operation.

a 50 % reduction on the Visual Analouge Scale (VAS) is considered clinically relevant.

#### Study design

Double-blind randomised mono-centre trial devided in an diagnostic fase and a therapeutic fase.

#### Intervention

Fase 1, diagnostic: Injection of lidocaine vs saline at the painpoint Fase 2, therapeutic conservative: injection of lidocaine and Kenacort at the painpoint in all patients

Fase 3, therapeutic operative: Neurectomy vs Sham operation.

#### Study burden and risks

The risk is cinsidered minor and no different than any procedure. Both infection and hematoma are the most common complications, alltough rare (less than 5 %), for injection and/or surgery. Sujested surgery is superficial and minor.

The biggest burden is on those subjected to a sham or placebo procedure. They potentially remain in pain for at least 6 weeks more. Eventually they will be offered a neurectomy at a later state. No longterm os irriversable hazzards are to be expected.

There is no personal benefit. This study will provide evidency of the entity ACNES and usefull treatment. More widespread knowlege of ACNES might prevent future patients to be submitted to unnecessary diagnostic procedures and even major abdominal surgery

## **Contacts**

#### **Public**

Máxima Medisch Centrum

De Run 4600 Postbus 7777 5500 MB Veldhoven Nederland **Scientific** Máxima Medisch Centrum

De Run 4600 Postbus 7777 5500 MB Veldhoven Nederland

# Trial sites

#### **Listed location countries**

**Netherlands** 

# **Eligibility criteria**

#### Age

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

#### Inclusion criteria

Localized abdominal wall pain in the rectus muscle positive Carnett sign

#### **Exclusion criteria**

Suspected intra-abdominal pain Anticoagulants use

# Study design

## **Design**

Study type: Interventional

Intervention model: Parallel

Allocation: Randomized controlled trial

Masking: Double blinded (masking used)

Control: Placebo

Primary purpose: Diagnostic

#### Recruitment

NL

Recruitment status: Recruitment stopped

Start date (anticipated): 01-09-2008

Enrollment: 44

Type:	Actu	ıal

# **Ethics review**

Approved WMO

Date: 04-09-2008

Application type: First submission

Review commission: METC Maxima Medisch Centrum (Veldhoven)

# **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 NL23189.015.08