Surgical Management of Deep Posterior Compartment Syndrome of the Leg

Published: 15-02-2008 Last updated: 10-05-2024

Compare two surgical techniques for treatment of posterior CECS.

Ethical review Approved WMO **Status** Will not start

Health condition type Soft tissue therapeutic procedures

Study type Interventional

Summary

ID

NL-OMON31782

Source

ToetsingOnline

Brief title

Surgery of CECS of the leg

Condition

Soft tissue therapeutic procedures

Synonym

Chronic Exercise Induced Compartment Syndrome, Compartment Syndrome

Research involving

Human

Sponsors and support

Primary sponsor: Máxima Medisch Centrum

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

Intervention

Keyword: CECS, deep posterior, leg, surgery

Outcome measures

Primary outcome

The change in intracompartmental pressure measured by the dynamic pressure measurement pre- and post-operatively.

Secondary outcome

The secondary study parameter is the change in pain in daily/sports activities expressed by a VAS score.

Study description

Background summary

Surgery for a Chronic Exercise Induced Compartment Syndrome (CECS) of the posterior muscles of the leg has poor post-operative results. Different surgical techniques have been proposed but none has shown to be superior.

Study objective

Compare two surgical techniques for treatment of posterior CECS.

Study design

Randomised Controlled Trial

Intervention

Group 1: release of the fascia cruris

Group 2: release of the fascia cruris, as well as a release of the m. flexor digitorum, while leaving the insertion in place. Inspection of the m. tibialis posterior for an eventual extra compartment, and eventual release.

Study burden and risks

The main risk is that the group treated with the limited fasciotomy may be under treated.

An additional risk is that the patients will have to undergo an extra intra-compartmental pressure measurement post-operatively. Nevertheless, these

2 - Surgical Management of Deep Posterior Compartment Syndrome of the Leg 26-05-2025

measurements are usually not associated with substantial health risks. Other burdens will be an extra visit to the hospital for an MRI-scan pre-operatively and questionnaires to be filled out.

Contacts

Public

Máxima Medisch Centrum

de Run 4600 5500 MB Eindhoven NL

Scientific

Máxima Medisch Centrum

de Run 4600 5500 MB Eindhoven NL

Trial sites

Listed location countries

Netherlands

Eligibility criteria

Age

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

Inclusion criteria

- individuals (m/f) suffering from CECS
- a positive dynamic compartment pressure measurement
- 18-40 years, since it s a sports-related injury and this is the predominant age group where CECS occurs
- sports-related
- just the deep posterior compartment involved. This can be determined by the pressure measurement
 - 3 Surgical Management of Deep Posterior Compartment Syndrome of the Leg 26-05-2025

- failure of conservative management (physical therapy/inlays)

Exclusion criteria

Previous surgery on the leg

Study design

Design

Study type: Interventional

Intervention model: Parallel

Allocation: Randomized controlled trial

Masking: Single blinded (masking used)

Control: Active

Primary purpose: Treatment

Recruitment

NL

Recruitment status: Will not start

Enrollment: 40

Type: Anticipated

Ethics review

Approved WMO

Date: 15-02-2008

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 NL18179.015.07