# Effect of functional electrical stimulation of the ankle dorsiflexor muscles on the recovery of walking ability in patients with sub/postacute stroke.

No registrations found.

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

Health condition type -

Study type Interventional

## **Summary**

#### ID

NL-OMON22640

Source

NTR

**Brief title** 

**FES-CVA** 

**Health condition** 

stroke gait functional electrical stimulation

## **Sponsors and support**

**Primary sponsor:** Erasmus medical center Rotterdam

**Source(s) of monetary or material Support:** Libra zorggroep (rehabilitation center)

Eindhoven, Tilburg The netherlands

#### Intervention

#### **Outcome measures**

#### **Primary outcome**

- 1. 10m Walk Test (10MLT);
- 2. 6 minutes walk test (6MWT).

#### **Secondary outcome**

- 1. Berg Balance Scale (BBS);
- 2. Motricity Index of the lower extremities (MI);
- 3. Modified Ashworth Scale (MAS);
- 4. Functional Ambulation Categories (FAC);
- 5. Ankle movement; the maximum dorsiflexion of the ankle.

## **Study description**

#### **Background summary**

This study is to identify the effects of a functional elektrical peroneal stimulation (FES) compared to ankle foot orthosis (AFO) on the recovery of walking ability in stroke patients with hemiparesis in the sub/ post-acute phase?

#### **Study objective**

There is no difference in het use of Functional electrical stimulation compared to the use of an ankle foot orthosis in the subacute / post-acute phase after stroke on the recovery of walking ability.

#### Study design

The participants were evaluated before and immediately after the training program.

#### Intervention

Participants are randomised to sessions of 30 minutes a day, 5 days a week, for 4 weeks of physiotherapy using either the FES walking aid or the AFO.

## **Contacts**

#### **Public**

afdeling Revalidatiegeneeskunde & Fysiotherapie<br/>
br> Erasmus MC / Rijndam Revalidatiecentrum / Libra Zorggroep M. Kortsmit

Rotterdam

The Netherlands

#### **Scientific**

afdeling Revalidatiegeneeskunde & Fysiotherapie < br> Erasmus MC / Rijndam Revalidatiecentrum / Libra Zorggroep M. Kortsmit Rotterdam The Netherlands

# **Eligibility criteria**

#### Inclusion criteria

- 1. Patients with a first stroke;
- 2. Subacute phase after stroke (between 4 weeks and 6 months after onset);
- 3. Age between 18-70 years;
- 4. Ischemic or hemorrhagic stroke;
- 5. Hemiparesis;
- 6. The passive range of motion of the dorsiflexor muscle of the ankle on the hemiparetic side is minimal 5 degrees;
- 7. Functional ambulation scale score 3.

#### **Exclusion criteria**

- 1. Cardiac or pulmonary disease that creates a contraindication for physical training;
- 2. On-demand pacemaker, defibrillator or any electrical or metal implant that could be influenced by the electrostimulation;
- 3. Malignant tumors;

4. Presence of a fracture or dislocation in the affected leg.

# Study design

## **Design**

Study type: Interventional

Intervention model: Parallel

Allocation: Randomized controlled trial

Masking: Single blinded (masking used)

Control: Active

#### Recruitment

NL

Recruitment status: Recruiting
Start date (anticipated): 01-08-2012

Enrollment: 30

Type: Anticipated

## **Ethics review**

Positive opinion

Date: 04-03-2013

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 NL3716 NTR-old NTR3879

Other METC Erasmus MC : MEC-2012-021 ISRCTN Wordt niet meer aangevraagd.

# **Study results**

### **Summary results**

N/A