

# 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.

<b>Ethical review</b>	Positive opinion
<b>Status</b>	Recruiting
<b>Health condition type</b>	-
<b>Study type</b>	Interventional

## Summary

### ID

NL-OMON22640

### Source

Nationaal Trial Register

### 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 electrical 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 the 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>  
Erasmus MC / Rijndam Revalidatiecentrum / Libra Zorggroep  
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**Scientific**

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## 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	ISRCTN wordt niet meer aangevraagd.

## Study results

### Summary results

N/A