

Determine the effect of an upper leg muscle surgery on stroke survivors walking with a stiff knee gait.

No registrations found.

Ethical review	Not applicable
Status	Pending
Health condition type	-
Study type	Observational non invasive

Summary

ID

NL-OMON21849

Source

NTR

Health condition

Stroke patients with a stiff knee gait.

Sponsors and support

Primary sponsor: Roessingh Research & Development

Roessinghsbleekweg 3b

7522 AH Enschede

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Source(s) of monetary or material Support: Roessingh Research & Development

Intervention

Outcome measures

Primary outcome

Primary study outcome is knee flexion in swing phase

Secondary outcome

Secondary study outcomes are hip , knee ankle kinematics. EMG activity of muscles of the under extremity, BORG- and VAS questionnaires on tonus, Duncan-Ely test for m. rectus femoris, six minutes walking test, pulmonary-function test, Timed Up and Go (TUG), L-test, Timed Up Stairs test, Motricity Index, Rivermead Mobility Index en the Stroke Impact scale (SIS).

Study description

Study objective

Falling and tripping are due to foot clearance problems in stroke patients who have a Stiff Knee Gait (SKG). SKG is defined as diminished and delayed peak knee flexion in swing. One main cause of stiff-knee gait in stroke patients is spasticity in the rectus femoris muscle. A treatment to increase diminished knee flexion in SKG is a rectus femoris transfer (RFT). This surgery (RFT) is often applied in cerebral palsy children and stroke patients, the m. rectus femoris will be fixed from ventral side of the knee (extensor) to dorsal side of the knee (flexor). Therefore, the m. rectus femoris function will switch from a knee flexor to a knee extensor. RFT intervention is limited review with subjective measurements in stroke patients.

Study design

A pre and posttest design will be used.

Primary outcome will be measured by:

- Vicon 3D gait analysis

Secondary outcomes will be measured by:

- Electromyography
- CosMed K4b2
- Borg en VAS questionnaires
- Duncan-Ely test
- Force platform
- Motricity Index

- Rivermead Mobility Index
- 6 minutes walking test
- Timed Up and Go-test
- Timed Up Stairs test
- L-Test
- 10 meter looptest
- Stroke Impact Scale⁸

Intervention

Inapplicable.

Contacts

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Eligibility criteria

Inclusion criteria

- Patient has eligible for a rectus femoris transfer surgery by treating physiatrist/orthopedist and has been informed about the surgery.
- Age > 18 years

- More than 6 months after stroke
- Patient walks independently (FAC ≥ 3)
- Patient knows time, place and person. Patient could understand motor-,cognitive and communicative instructions.

Exclusion criteria

- Neurological impairments that are not due to stroke
- Progressive disease that influence gait

Study design

Design

Study type:	Observational non invasive
Intervention model:	Other
Allocation:	Non controlled trial
Masking:	Open (masking not used)
Control:	N/A , unknown

Recruitment

NL	
Recruitment status:	Pending
Start date (anticipated):	01-05-2015
Enrollment:	17
Type:	Anticipated

Ethics review

Not applicable	
Application type:	Not applicable

Study registrations

Followed up by the following (possibly more current) registration

ID: 41870

Bron: ToetsingOnline

Titel:

Other (possibly less up-to-date) registrations in this register

No registrations found.

In other registers

Register	ID
NTR-new	NL4982
NTR-old	NTR5129
CCMO	NL51373.044.14
OMON	NL-OMON41870

Study results