Short range stiffness in stroke patients

Published: 14-03-2012
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The Primary objective is to quantify the Short Range Stiffness dynamics after stroke in order to quantify the tonic muscle co-activation.

Ethical review	Approved WMO
Status	Recruitment stopped
Health condition type	Central nervous system vascular disorders
Study type	Observational non invasive

Summary

ID

NL-OMON38175

Source
ToetsingOnline

Brief title
SRS-stroke

Condition

- Central nervous system vascular disorders

Synonym
cerebrovascular accident, stroke

Research involving
Human

Sponsors and support

Primary sponsor: Leids Universitair Medisch Centrum
Source(s) of monetary or material Support: Ministerie van OC&W

Intervention

Keyword: cerebrovasular attack, short range stiffness, stroke, wrist stiffness

Outcome measures

Primary outcome

Primairy outcome is the Short Range Stiffness, which is compared between the patient group and the control group.

Secondary outcome

The secundaire outcome within the patient group is the clinical defined wrist stiffnes, instrumented by the modified Ashworth Scale (mAS) and the Tardieu Scale (TS). The clinical outcome will be related to the Short Range Stiffness

Study description

Background summary

Altered joint stiffness i.e. in the wrist after a stroke can lead to problems in daily functioning. For treatment is necessary to identify the cause of the stiffness. This can either be passive connective tissue, reflexive or muscular stiffness. By determining the Short Range Stiffness (SRS) the contribution of muscular stiffness can be separated from the passive (connective tissue) component and the reflective component.

Study objective

The Primary objective is to quantify the Short Range Stiffness dynamics after stroke in order to quantify the tonic muscle co-activation.

Study design

This study is an observational case-control study. The Short Range Stiffnessis measured in both the patient group and the control group. For the patient group additionally two clinical tests will be perform, the Modified Asworth Scale (MAS) and Tardie Scale (TS). The duration of one session lasts 60 and 90 minutes for controls and patients respectively.

Study burden and risks

The burden of the study is low. All participants must perform a light isometric

force and a movement within their range of motion. In addition, the clinical tests are performed passively by the examiner again within the range of motion. There are are no known risks with the measurement of SRS and also no known risks with the clinical tests .

Contacts

Public
Leids Universitair Medisch Centrum

PObox 9600
2300 RC Leiden
NL
Scientific
Leids Universitair Medisch Centrum

PObox 9600
2300 RC Leiden
NL

Trial sites

Listed location countries

Netherlands

Eligibility criteria

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

Inclusion criteria

General:
· ability to sit on a chair for 60 minutes
· the ability to follow verbal instructions;additional for Stroke group
· first stroke
· 6 months post stroke
· the ability to generate a 1Nm flexion torque of the wrist

· modified asworth score > 1

Exclusion criteria

General:
· complaints or pain or surgery at the wrist
· musculoskeletal disorders that could interfere with experimental tests;additional for Stroke group
· the ability to understand and perform the task

Study design

Design

Study type:	Observational non invasive
Intervention model:	Other
Allocation:	Non-randomized controlled trial
Masking:	Open (masking not used)
Control:	Active
Primary purpose:	Basic science

Recruitment

NL

Recruitment status:	Recruitment stopped
Start date (anticipated):	01-03-2012
Enrollment:	30
Type:	Actual

Ethics review

Approved WMO

Date:	14-03-2012
Application type:	First submission
Review commission:	METC Leiden-Den Haag-Delft (Leiden) metc-ldd@lumc.nl

Approved WMO Date:	18-09-2012
Application type:	Amendment
Review commission:	METC Leiden-Den Haag-Delft (Leiden) metc-ldd@lumc.nl

Approved WMO Date:	21-05-2013
Application type:	Amendment
Review commission:	METC Leiden-Den Haag-Delft (Leiden) metc-ldd@lumc.nl

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	NL35888.058.12