Invloed van een robotische handschoen op het reiken en grijpen na CVA

No registrations found.

Ethical review	Not applicable
Status	Pending
Health condition type	-
Study type	Interventional

Summary

ID

NL-OMON20620

Source
NTR

Health condition

Upper extremity impairment after stroke
CVA

Funtiebeperking bovenste extremiteit na een beroerte

Sponsors and support

Primary sponsor: Roessingh Research and Development BV, Enschede
Source(s) of monetary or material Support: H2020, grant agreement number 644000

Intervention

Outcome measures

Primary outcome

The main study parameters are outcomes related to (functional) task performance and movement execution. To examine the direct influence of the grasp support system on (functional) performance of the most-affected arm and hand during the different proposed conditions, the following main study parameters will be measured: • Qualitative observations of functional task performance and movement execution (e.g. speed of movement, precision,

fluidity, compensatory movements) • Quantitative parameters of functional task performance and movement execution (e.g. performance time, kinematics of hand and arm joints, movement path, velocity (profile), acceleration and jerk)

Secondary outcome

To explore user acceptance of the grasp support system and to examine the direct effect of the grasp support system on changes in hand strength and movement execution, the following parameters will be registered during the measurements: • System Usability Scale (SUS) • Semi-structured interview about user's experience • Action Research Arm Test (ARAT) • Maximal pinch force (Jamar pinch Gauge dynamometer)

Study description

Study design

Patients will visit the lab once.

Movement execution will be researched and analyzed with a 3D motion analysis system (VICON) and afterwards with a custom written matlab file.

User acceptance will be measured with the System Usability scale and semi-structured interviews

Hand strength will be measured with a dynanometer

Intervention

-

Contacts

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Eligibility criteria

Inclusion criteria

- Patients should be clinically diagnosed with unilateral ischemic or hemorrhagic stroke

- Between 18-80 years of age

- Time since onset of disease is at least three months

- At least 10 degrees of active flexion and extension of the fingers

- Sufficient cognitive status to understand two-step instructions - Having (corrected to) normal vision

-Provided written informed consent

Exclusion criteria

- People with severe sensory problems of the affected upper extremity

- People with severe acute pain of the affected arm -People who participate in other studies that can affect functional performance of the arm and hand

- People having insufficient knowledge of the Dutch language to understand the purpose or methods of the study

- People with severe contractures limiting passive range of motion

- People with co-morbidities limiting functional use of the hand

-People with wounds on their hand that can give a problem when using the system

Study design

Design

Study type:	Interventional
Intervention model:	Other
Masking:	Open (masking not used)
Control:	N/A , unknown

Recruitment

NL

Recruitment status:	Pending
Start date (anticipated):	01-11-2016
Enrollment:	10
Type:	Anticipated

Ethics review

Not applicable

Application type:	Not applicable

Study registrations

Followed up by the following (possibly more current) registration

ID: 43175
Bron: ToetsingOnline
Titel:

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

No registrations found.

In other registers

Register	ID
NTR-new	NL5909
NTR-old	NTR6097
CCMO	NL58778.044.16
OMON	NL-OMON43175

Study results