

Rehabilitation of functional muscle and motor capacity in neurodegenerative disease: Multiple Sclerosis research

Submission date 19/08/2009	Recruitment status No longer recruiting	☐ Prospectively registered
Registration date 01/10/2009	Overall study status Completed	☐ Protocol
Last Edited 01/10/2009	Condition category Nervous System Diseases	☐ Statistical analysis plan
		☐ Results
		☐ Individual participant data
		☐ Record updated in last year

Plain English summary of protocol

Not provided at time of registration

Contact information

Type(s)

Scientific

Contact name

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Contact details

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Additional identifiers

Protocol serial number

050078 IWT TETRA

Study information

Scientific Title

Rehabilitation of functional muscle and motor capacity in neurodegenerative disease: a single centre placebo-controlled Multiple Sclerosis research trial

Acronym

MS rehabilitation

Study objectives

Regular and moderately intense rehabilitation of muscle strength improves functional capacity in multiple sclerosis (MS) patients.

Ethics approval required

Old ethics approval format

Ethics approval(s)

Ethics Board of Hasselt University approved on the 24th October 2005 (ref: CME 2005/233)

Primary study design

Interventional

Study design

Single centre placebo-controlled clinical research trial

Study type(s)

Treatment

Health condition(s) or problem(s) studied

Multiple sclerosis

Interventions

Patients will be subjected to different rehabilitation modes during a period of 24 weeks and according to a specific treatment protocol:

1. Control
2. Strength training
3. Strength training and electro-stimulation
4. Whole body vibration
5. Micro-electrotherapy

At baseline and following 12 and 24 weeks of therapy all endpoints will be measured.

Intervention Type

Other

Phase

Not Applicable

Primary outcome(s)

Measured at baseline, mid- (after 10 weeks intervention) and post-treatment (after 20 weeks of intervention):

1. Maximal isometric muscle strength of knee-extensors and flexors
2. Isotonic and isokinetic dynamic muscle strength using an isokinetic dynamometer
3. Functional performances
4. Blood samples
5. Motor control (surface electromyography [sEMG], in-phase and anti-phase motor coordination test equipment)
6. Quality of life (specific questionnaire) assessment

Key secondary outcome(s)

1. Visual Analogue Scale (VAS) measured before and after each training session
2. Borg Scale measured after each training session

Completion date

01/12/2007

Eligibility**Key inclusion criteria**

1. MS patients (Expanded Standard Disability Status Scale [EDSS] 0.5 - 3) that have functional muscle and motor functional disabilities
2. Males and females aged 20 - 65 years
3. 24-week availability

Participant type(s)

Patient

Healthy volunteers allowed

No

Age group

Adult

Sex

All

Key exclusion criteria

1. Any pathology that is a contra-indication for rehabilitation training
2. Wheelchair dependency
3. No present physiotherapy (preferably)

Date of first enrolment

01/11/2005

Date of final enrolment

01/12/2007

Locations**Countries of recruitment**

Belgium

Study participating centre

Guffenslaan 39
Hasselt
Belgium
B-3500

Sponsor information

Organisation

IWT Vlaanderen (Instituut voor de aanmoediging van Innovatie door Wetenschap en Technologie in Vlaanderen) (Belgium)

ROR

<https://ror.org/032xdry56>

Funder(s)

Funder type

Research organisation

Funder Name

IWT Vlaanderen (Instituut voor de aanmoediging van Innovatie door Wetenschap en Technologie in Vlaanderen) (Belgium) (ref: 050078)

Results and Publications

Individual participant data (IPD) sharing plan

IPD sharing plan summary

Not provided at time of registration