

The N-methyl-D-aspartate (NMDA)-antagonist memantine affects training induced motor cortex plasticity: a study using transcranial magnetic stimulation

Submission date 06/05/2005	Recruitment status No longer recruiting	<input type="checkbox"/> Prospectively registered <input type="checkbox"/> Protocol
Registration date 09/05/2005	Overall study status Completed	<input type="checkbox"/> Statistical analysis plan <input checked="" type="checkbox"/> Results
Last Edited 15/02/2008	Condition category Other	<input type="checkbox"/> Individual participant data

Plain English summary of protocol
Not provided at time of registration

Contact information

Type(s)
Scientific

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Additional identifiers

EudraCT/CTIS number

IRAS number

ClinicalTrials.gov number

Secondary identifying numbers

N/A

Study information

Scientific Title

Study objectives

Training of a repetitive synchronised movement of two limb muscles leads to short-term plastic changes in the primary motor cortex, which can be assessed by transcranial magnetic stimulation (TMS) mapping.

Ethics approval required

Old ethics approval format

Ethics approval(s)

Not provided at time of registration

Study design

Randomised controlled trial

Primary study design

Interventional

Secondary study design

Randomised controlled trial

Study setting(s)

Hospital

Study type(s)

Treatment

Participant information sheet

Health condition(s) or problem(s) studied

Training induced motor cortex plasticity

Interventions

Memantine versus placebo either given as a single dose or daily over 8 days.

Intervention Type

Drug

Phase

Not Specified

Drug/device/biological/vaccine name(s)

Memantine

Primary outcome measure

The differential effects of different treatment regimens.

Secondary outcome measures

Not provided at time of registration

Overall study start date

01/06/1998

Completion date

31/01/2005

Eligibility

Key inclusion criteria

Healthy subjects (adults, either sex)

Participant type(s)

Patient

Age group

Adult

Sex

Both

Target number of participants

20

Key exclusion criteria

1. Left-handedness
2. Neurological disorders
3. Intake of central acting drugs

Date of first enrolment

01/06/1998

Date of final enrolment

31/01/2005

Locations

Countries of recruitment

Germany

Study participating centre

Department of Neurology
Bochum

Germany
44789

Sponsor information

Organisation

BG-Kliniken Bergmannsheil (Germany) - Department of Neurology

Sponsor details

Buerkle-de-la-Camp-Platz 1
Bochum
Germany
44789

Sponsor type

Hospital/treatment centre

ROR

<https://ror.org/04j9bvy88>

Funder(s)

Funder type

Hospital/treatment centre

Funder Name

BG-Kliniken Bergmannsheil (Germany) - Department of Neurology; main funders

Funder Name

Merz Pharmaceuticals GmbH (Germany) - funded the measurement of the memantine serum levels

Results and Publications

Publication and dissemination plan

Not provided at time of registration

Intention to publish date

Individual participant data (IPD) sharing plan

IPD sharing plan summary

Not provided at time of registration

Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Results article	Results	12/05/2005		Yes	No