ISRCTN65784760 https://doi.org/10.1186/ISRCTN65784760

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

Registration date
09/05/2005

Overall study status
Completed

Last Edited
15/02/2008

Condition category
Other

[_] Prospectively registered
[_] Protocol
[_] Statistical analysis plan
[X] Results
[_] 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

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

Primary study design
Interventional

Study design
Randomised controlled trial

Study type(s)
Treatment

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(s)
The differential effects of different treatment regimens.

Key secondary outcome(s)
Not provided at time of registration

Completion date
31/01/2005

Eligibility

Key inclusion criteria
Healthy subjects (adults, either sex)

Participant type(s)
Patient

Healthy volunteers allowed
No

Age group
Adult

Sex
All

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

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

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