

PLEASE NOTE: *This trial has been registered retrospectively.*

Trial Description

Title

Effects of a single mental chronometry training in subacute stroke patients

Trial Acronym

Mental chronometry training

URL of the trial

[---]*

Brief Summary in Lay Language

The aim of this study is to find out if a 30 minutes training of a mental chronometry (MC) task is able to improve MC capability in subacute stroke patients. The task is to imagine how to move 15 blocks with the affected hand from one side of a box to the other side (Box-and-block Test). This Patient group also participates in a 30 minutes Training of a spatial Imagination task. The sequence of both Trainings is randomized. The interval between the Trainings is at least 3 days. Before and after each Training the Box-and-Block Test is executed as well as performed mentally. The time difference between execution and Imagination represents the Quality of MC. Our Hypothesis is that MC capability will be improved by a single MC Training but not by the Control Intervention.

Brief Summary in Scientific Language

This study explores if a single session of motor imagery (MI) training induces performance changes in mental chronometry (MC), motor execution, or changes of motor excitability.

Subacute stroke patients performed 30 minutes of a mental chronometry Training and, on a different Occasion, a Hand identification Training which requires imagery in three-dimensional space.

Do you plan to share individual participant data with other researchers?

Yes

Description IPD sharing plan

The results (motor performance, motor imagery, TMS results, data obtained during the training) will be provided if requested

Organizational Data

- DRKS-ID: **DRKS00020355**
- Date of Registration in DRKS: **2020/03/09**
- Date of Registration in Partner Registry or other Primary Registry: [---]*
- Investigator Sponsored/Initiated Trial (IST/IIT): **yes**
- Ethics Approval/Approval of the Ethics Committee: **Approved**
- (leading) Ethics Committee Nr.: **98/15 , Ethikkommittee der Universität Konstanz**

Secondary IDs

Health condition or Problem studied

- ICD10: **I63.4 - Cerebral infarction due to embolism of cerebral arteries**

Interventions/Observational Groups

- Arm 1: **The intervention "Mental Chronometry" comprises a mental practice for 30 minutes. Patients are asked to imagine moving blocks from one side of a box to the other side by using their affected hand.**
- Arm 2: **As a control intervention, patients perform the "Hand identification task" for 30 minutes. Hands are presented in different positions on a screen, and patients have to decide whether a left or a right hand was shown.**

Characteristics

- Study Type: **Interventional**
- Study Type Non-Interventional: [---]*
- Allocation: **Randomized controlled trial**
- Blinding: [---]*
- Who is blinded: **assessor, data analyst**
- Control: **Active control (effective treatment of control group)**
- Purpose: **Treatment**
- Assignment: **Crossover**
- Phase: **N/A**
- Off-label use (Zulassungsüberschreitende Anwendung eines Arzneimittels): **N/A**



Primary Outcome

Changes of mental chronometry. Tests are performed immediately prior to and after the 30 minutes of training.

Secondary Outcome

Changes of motor Performance (Box and Block test)

Countries of recruitment

- DE **Germany**

Locations of Recruitment

Recruitment

- Planned/Actual: **Actual**
- (Anticipated or Actual) Date of First Enrollment: **2016/01/02**
- Target Sample Size: **33**
- Monocenter/Multicenter trial: **Monocenter trial**
- National/International: **National**

Inclusion Criteria

- Gender: **Both, male and female**
- Minimum Age: **18 Years**
- Maximum Age: **no maximum age**

Additional Inclusion Criteria

ability to understand the instructions, the willingness to participate, an ischemic or hemorrhagic stroke < 6 months ago as proven by cranial computed tomography or magnetic resonance imaging of the brain and the ability to grasp and release blocks that are typically used in a classical Box and Block Test

Exclusion criteria

inability to understand the instructions, aphasia, dementia, hemianopia, spatial neglect, anosognosia, severe other illness that could interfere with the ability to participate actively. Exclusion criteria for TMS application were a history of



epileptic seizures, pregnancy, metallic implants in the brain and heart pace makers.

Addresses

■ Primary Sponsor

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Sources of Monetary or Material Support

■ Institutional budget, no external funding (budget of sponsor/PI)

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Status

- Recruitment Status: **Recruiting complete, follow-up complete**
- Study Closing (LPLV): **2017/10/31**

Trial Publications, Results and other documents

* This entry means the parameter is not applicable or has not been set.

*** This entry means that data is not displayed due to insufficient data privacy clearing.