# Anterograde amnesia with electroconvulsive therapy; severety and course; a prospective controled cohort study

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This study aims at the questions about anterograde amnesia. How often does it occur in patients being treated with bilateral ECT for a depressive disorder, how does anterograde amnesia develop during the treatment course and how does it subside...

**Ethical review** Approved WMO **Status** Recruiting

Health condition type Mood disorders and disturbances NEC

**Study type** Observational non invasive

# **Summary**

#### ID

NL-OMON34702

#### **Source**

ToetsingOnline

#### **Brief title**

**AAWE** 

### **Condition**

Mood disorders and disturbances NEC

#### Synonym

depression, depressive disorder

#### Research involving

Human

## **Sponsors and support**

**Primary sponsor:** Erasmus MC, Universitair Medisch Centrum Rotterdam

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Source(s) of monetary or material Support: Ministerie van OC&W

#### Intervention

**Keyword:** anterograde amnesia, ECT, electroconvulsive therapy, memory, post-ictal delirium, side-effects

## **Outcome measures**

### **Primary outcome**

Primary outcome measure is the test for anterograde amnesia: the verbal

learning test.

## **Secondary outcome**

Secondary outcome measures are the visual association test for anterograde amnesia and post ictal confusion.

# **Study description**

## **Background summary**

The most important side-effect of electroconvulsive therapy (ECT) is retrograde- and anterograde amnesia. Retrograde amnesia is a form of amnesia where someone will be unable to recall events that occured before the development of amnesia. Anterograde amnesia is a loss of the ability tot create memories after the event that caused the amnesia occurs. A lot is known about retrograde amnesia. After ECT some patients will still have trouble remembering episodes during their treatment. Less is known about anterograde amnesia and ECT.

Anterograde amnesia can occur during the ECT course and usually subsides in a couple of weeks after cessation of the ECT. At least this is what usually occurs and is known by the professionals.

## **Study objective**

This study aims at the questions about anterograde amnesia. How often does it occur in patients being treated with bilateral ECT for a depressive disorder, how does anterograde amnesia develop during the treatment course and how does it subside after termination af the treatment. Moreover, how does the prevalence, development during and after the treatment compare to patients on

antidepressants for depressive disorder? Is anterograde amnesia influenced by cognitive disorders prior to ECT and how is it influenced by post ictal delirium after ECT treatment?

## Study design

Prior to ECT patients will be screened with the depression part of the Schedule for Affective Disorders and schizophrenia, Hammilton Rating Scale for Depression and the Minimal Mental State Examination. After inclusion 20 consecutive patients will be tested for anterograde amnesia with the verbal learning test and the visual association test. During ECT the tests will be done after 2 and 4 weeks. ALso after each treatment post ictal confusion will be tested. Response to ECT will be monitored using the Hammilton Depression Rating Scale weekly.

After the ECT course both the verbal learning test and the visual association test will be repeated.

The comparison group of 20 patients being treated with antidepressants will be tested with the same scales before and after the treatment with the antidepressant.

A total of 40 patients is included in the study of wich 20 are being treated with pharmacotherapy and 20 with ECT.

## Study burden and risks

Burden will be minimal, the results of this research will be of benefit for future patients to be treated with ECT. Hopefully this research improves our knowledge of anterograde amnesia and will it improve our information for those undergoing this treatment in the future.

# **Contacts**

#### **Public**

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### **Scientific**

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# **Trial sites**

## **Listed location countries**

**Netherlands** 

# **Eligibility criteria**

## Age

Adults (18-64 years) Elderly (65 years and older)

## Inclusion criteria

Depressive disorder according to DSM IV criteria, at least a score of 18 on the Hammilton depression rating scale, informed consent

## **Exclusion criteria**

Dementia, neurological of other severe somatic conditions, drug or alcohol abuse

# Study design

# Design

Study type: Observational non invasive

Intervention model: Other

Allocation: Non-randomized controlled trial

Masking: Open (masking not used)

Control: Active Primary purpose: Other

## Recruitment

NL

Recruitment status: Recruiting
Start date (anticipated): 02-06-2010

Enrollment: 40

Type: Actual

# **Ethics review**

Approved WMO

Date: 20-05-2010

Application type: First submission

Review commission: METC Erasmus MC, Universitair Medisch Centrum Rotterdam

(Rotterdam)

# **Study registrations**

# Followed up by the following (possibly more current) registration

No registrations found.

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

No registrations found.

# In other registers

Register ID

CCMO NL31680.078.10