

# Neuropsychological rehabilitation in patients with impairments in memory and attention after long term occupational exposure to organic solvents

|                                        |                                                      |                                                      |
|----------------------------------------|------------------------------------------------------|------------------------------------------------------|
| <b>Submission date</b><br>11/08/2011   | <b>Recruitment status</b><br>No longer recruiting    | <input type="checkbox"/> Prospectively registered    |
| <b>Registration date</b><br>31/08/2012 | <b>Overall study status</b><br>Completed             | <input type="checkbox"/> Protocol                    |
| <b>Last Edited</b><br>29/10/2015       | <b>Condition category</b><br>Nervous System Diseases | <input type="checkbox"/> Statistical analysis plan   |
|                                        |                                                      | <input type="checkbox"/> Results                     |
|                                        |                                                      | <input type="checkbox"/> Individual participant data |
|                                        |                                                      | <input type="checkbox"/> Record updated in last year |

## Plain English summary of protocol

### Background and study aims

Long-term occupational exposure to neurotoxic chemicals like toluene, trichloroethylene and benzene is widespread in many industries all over the world and may result in the syndrome Chronic Solvent induced Encephalopathy (CSE). Most patients with CSE do not recover; the disabilities arising from memory and attentional impairment usually continue, severely affecting daily functioning, social participation, working ability, and therefore quality of life. The aim of this study is to evaluate the effects of a psychological treatment programme for patients diagnosed with CSE.

### Who can participate?

Patients diagnosed with CSE.

### What does the study involve?

Participants are randomly allocated to either the intervention group or the control group. The intervention group undergo a psychological treatment programme together with care as usual. The control group receive care as usual only.

### What are the possible benefits and risks of participating?

Patients may benefit from the psychological treatment being tested. Patients in the control group also received the psychological treatment after the study and therefore may also benefit from the intervention. There are no anticipated side effects from the psychological treatment.

### Where is the study run from?

Participants are recruited from the two locations of the Solvent Team in the Netherlands (Amsterdam and Enschede).

### When is the study starting and how long is it expected to run for?

March 2002 to June 2006.

Who is funding the study?  
Netherlands Center for Occupational Diseases (Netherlands).

Who is the main contact?  
Dr Ieke Visser  
i.visser@amc.uva.nl

## Contact information

**Type(s)**  
Scientific

**Contact name**  
Dr Ieke Visser

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## Additional identifiers

## Study information

**Scientific Title**  
Neuropsychological rehabilitation in workers with chronic solvent induced encephalopathy (CSE): a randomised controlled trial

**Study objectives**  
A neuropsychological rehabilitation programme in patients with chronic solvent induced encephalopathy is beneficial with respect to:  
1. Coping with cognitive impairments  
2. Subjective cognitive impairments in meta-memory  
3. Health related quality of life

**Ethics approval required**  
Old ethics approval format

**Ethics approval(s)**  
Academic Medical Centre (AMC) Amsterdam, 14/02/2011, ref: MEC 01/146

**Primary study design**  
Interventional

**Study design**  
Randomised controlled trial

**Study type(s)**

Treatment

**Health condition(s) or problem(s) studied**

Chronic solvent induced encephalopathy

**Interventions**

Patient were randomised, either to:

1. Intervention (neuropsychological rehabilitation group programme consisting of: memory training improving coping skills with cognitive impairments, cognitive behavioural therapy and psychosocial interventions aimed at improvement of social functioning)) together with care as usual (continuation of existing treatments) arm (INT + CAU)
2. Care as usual (CAU)

**Intervention Type**

Other

**Phase**

Not Applicable

**Primary outcome(s)**

1. Coping with cognitive impairment (CAMQ)
2. Subjective cognitive impairment (CFQ)
3. Meta memory (MIA)

Measured pre-intervention (T0), post intervention at 3 months (T1 ) and at 7 months follow up (T2)

**Key secondary outcome(s)**

Health related quality of life (SF-36) measured pre-intervention (T0), post intervention at 3 months (T1) and at 7 months follow up (T2)

**Completion date**

01/06/2006

**Eligibility****Key inclusion criteria**

1. Age > 17 years
2. Diagnosed with chronic solvent induced encephalopathy
3. 5 years or more exposure to organic solvents
4. Cessation of exposure not longer than three yrs before first diagnostic evaluation for CSE
5. Informed consent
6. Dutch speaking

**Participant type(s)**

Patient

**Healthy volunteers allowed**

No

**Age group**

Adult

**Sex**

All

**Key exclusion criteria**

1. Other neurological illness
2. Alcohol or drugs related disorders
3. Psychotic symptoms
4. Radiation therapy
5. Chemotherapy
6. Previous treatment in neuropsychological rehabilitation

**Date of first enrolment**

01/03/2002

**Date of final enrolment**

01/06/2006

**Locations****Countries of recruitment**

Netherlands

**Study participating centre**

**Meibergdreef 5**

Amsterdam

Netherlands

1105 AZ

**Sponsor information****Organisation**

Netherlands Center for Occupational Diseases (Netherlands)

**ROR**

<https://ror.org/00jtnvh80>

**Funder(s)****Funder type**

Government

**Funder Name**

Netherlands Center for Occupational Diseases (Netherlands)

**Results and Publications**

**Individual participant data (IPD) sharing plan**

**IPD sharing plan summary**

Not provided at time of registration