

Train the sedentary brain: move smart. The cognitive benefits of an interactive cycling training in APOEε4 carriers and non-carriers in early stage dementia

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A 3-month interactive cycling training is feasible and leads to improved executive functioning and physical fitness in early stage dementia patients. The association between physical activity and cognition is moderated by the presence of the ApoE4...

Ethische beoordeling	Positief advies
Status	Werving gestopt
Type aandoening	-
Onderzoekstype	Interventie onderzoek

Samenvatting

ID

NL-OMON29449

Bron

NTR

Aandoening

Dementia, Alzheimer, Cognitive decline, Physical activity

Ondersteuning

Primaire sponsor: Radboudumc

Overige ondersteuning: ZON-MW, organization for health research and development, the Netherlands. Project: 733050303

Onderzoeksproduct en/of interventie

Uitkomstmaten

Primaire uitkomstmaten

Executive functioning (set-shifting, response inhibition)

Toelichting onderzoek

Achtergrond van het onderzoek

There is no cure for dementia. Non pharmacological interventions are needed. The aim of this study is to investigate the cognitive effects of an interactive cycling training in early stage dementia patients, compared to an aerobic stationary cycling training and an active control group.

Doel van het onderzoek

A 3-month interactive cycling training is feasible and leads to improved executive functioning and physical fitness in early stage dementia patients. The association between physical activity and cognition is moderated by the presence of the ApoE4 allele.

Onderzoeksopzet

Full assessments at pretest, after 12 weeks and at follow up (24 weeks). Short assessments after 6 weeks.

Onderzoeksproduct en/of interventie

Within the study, three interventions are provided: (1) Interactive aerobic stationary cycle training, (2) Aerobic stationary cycle training, (3) Non-aerobic stretching and toning exercises. Forty-five minute sessions were offered 3 times per week for a period of 12 weeks. The interactive cycling training is a dual-task training in which participants follow a route on a screen in front of the bike and conduct simple cognitive tasks.

Contactpersonen

Publiek

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Deelname eisen

Belangrijkste voorwaarden om deel te mogen nemen (Inclusiecriteria)

Age > 60 years; diagnosis of dementia; Mini Mental State Examination score higher than 20; having insufficient physical activity according to the ACSM guideline for older adults, maximum of 30 minutes five days a week moderate intensity

Belangrijkste redenen om niet deel te kunnen nemen (Exclusiecriteria)

Wheelchair bound, use of dementia targeted nutritional supplements (e.g. Souvenaird) within the last three months, severe cardiovascular problems that limit physical activity, brain trauma, epilepsy, progressive or terminal disease, severe depression, history of alcoholism, severe visual problems, severe auditory problems, problems with the Dutch language and mental incompetence

Onderzoeksopzet

Opzet

Type:	Interventie onderzoek
Onderzoeksmodel:	Parallel

Toewijzing:	Gerandomiseerd
Blindering:	Enkelblind
Controle:	Geneesmiddel

Deelname

Nederland	
Status:	Werving gestopt
(Verwachte) startdatum:	01-09-2015
Aantal proefpersonen:	171
Type:	Werkelijke startdatum

Voornemen beschikbaar stellen Individuele Patiënten Data (IPD)

Wordt de data na het onderzoek gedeeld: Nog niet bepaald

Ethische beoordeling

Positief advies	
Datum:	07-10-2015
Soort:	Eerste indiening

Registraties

Opgevolgd door onderstaande (mogelijk meer actuele) registratie

Geen registraties gevonden.

Andere (mogelijk minder actuele) registraties in dit register

Geen registraties gevonden.

In overige registers

Register	ID
NTR-new	NL5348
NTR-old	NTR5581

Register

Ander register

ID

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Resultaten