The effects of Scanning Compensatory Therapy for patients with homonymous visual field defects - a randomised controlled trial

Published: 13-08-2010
Last updated: 03-05-2024

Investigating the effect of compensatory scanning therapy for people with homonymous hemianopia. The effects on function, activity and participation will be investigated. The secundairy goal is to investigate which factors predict the training…

Ethical review	Approved WMO
Status	Recruitment stopped
Health condition type	Other condition
Study type	Interventional

Summary

ID

NL-OMON34671

Source
ToetsingOnline

Brief title
Scanning Compensatory Therapy for hemianopia patients

Condition

- Other condition

Synonym
homonymous hemianopia, visual field defects

Health condition

visuele velduitval t.g.v. verworven hersenletsel

Research involving

Human

Sponsors and support

Primary sponsor: Universitair Medisch Centrum Groningen
Source(s) of monetary or material Support: Ministerie van OC&W,ZonMW - InZicht,CBR (middels leerstoel prof. dr. W.H. Brouwer)

Intervention

Keyword: compensatory scanning training, hemianopia

Outcome measures

Primary outcome

Eye movement paramters on scan tasks (such as number en duration of fixations

and number and size of saccades)

Secondary outcome

Tests for visual functioning, questionnaires, neuropsychological tests,

(ecological) scan and mobility tasks

Study description

Background summary

The largest group of visual disorders after acquired brain injury is homonymous visual field defects (HVFDs). Homonymous hemianopia refers to a loss of perception over half the field of vision, affecting both eyes, due to a deficient cortical representation of parts of the visual field or deficient transmission of information from the chiasm towards the visual cortex. Thirty percent of all patients with stroke have HVFDs, and 70% of these patients show a spatially disorganized visual search strategy. Such patients have particular difficulties with reading and visual exploration, which have far-reaching, disabling repercussions on their domestic and vocational lives.

Some authors have found evidence that patients may successfully adapt to their HVFDs by compensatory oculomotor strategies - that is, by learning to make large eye movements into the blind hemifield, thereby enlarging the field of search and improving visually guided activities of daily living. However, in

these studies, patients have acted as their own controls (within-subject repeated measure design) and the results of patients who received scanning compensatory therapy (SCT) have not been compared with those of an untreated control group. It is therefore necessary to study the effect of SCT in a randomized controlled trial to evaluate the specific effect of this treatment.

Study objective

Investigating the effect of compensatory scanning therapy for people with homonymous hemianopia. The effects on function, activity and participation will be investigated. The secundairy goal is to investigate which factors predict the training effect.

Study design

Single-blind controlled intervention study

Intervention

All participants will receive a scanning training at Koniklijke Visio. Thanks to this research study, this training has been protocolled and implemented in other parts of the country.

Study burden and risks

The study does not include invasive tests. The measurements have no negative consequences, neither for the participants, nor for their treatment at Koninklijke Visio. the only investment participants have to make, is a trip to Groningen, two or three times. Travel and lunch will be compensated. Patients know that they can refuse to participate in the study and that this will have no effect on their treatment at Koninklijke Visio.

Contacts

Public
Universitair Medisch Centrum Groningen

Hanzeplein 1
9713 GZ Groningen
NL
Scientific
Universitair Medisch Centrum Groningen

Hanzeplein 1

9713 GZ Groningen
NL

Trial sites

Listed location countries

Netherlands

Eligibility criteria

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

Inclusion criteria

-homonymous visual field defect due to acquired post-chiasmatic brain injury
-at least 6 months between acquired brain damage and first measurement
-age 18-75
-need for mobility training

Exclusion criteria

-only one functional eye
-unclear neurological cause of field defect
-severe unilateral neglect

Study design

Design

Study type:	Interventional
Intervention model:	Parallel
Allocation:	Randomized controlled trial
Masking:	Single blinded (masking used)

Primary purpose: Treatment

Recruitment

NL

Recruitment status:	Recruitment stopped
Start date (anticipated):	30-08-2010
Enrollment:	90
Type:	Actual

Ethics review

Approved WMO

Date:	13-08-2010
Application type:	First submission
Review commission:	METC Universitair Medisch Centrum Groningen (Groningen)

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	NL31718.042.10