normal temporal contrast sensitivity and retinal illuminance

Published: 18-11-2011 Last updated: 30-04-2024

The objective of this study is to determine the effect of retinal illuminance on TCS outcome.

Ethical review	Approved WMO
Status	Will not start
Health condition type	Vision disorders
Study type	Observational non invasive

Summary

ID

NL-OMON35452

Source ToetsingOnline

Brief title temporal contrast sensitivity

Condition

• Vision disorders

Synonym neuronal disorders, retinal disorders

Research involving Human

Sponsors and support

Primary sponsor: Academisch Medisch Centrum Source(s) of monetary or material Support: Ministerie van OC&W

Intervention

Keyword: flicker test, temporal contrast sensitivity

Outcome measures

Primary outcome

The primary study parameter is the measured temporal contrast sensitivity value

Secondary outcome

N/A

Study description

Background summary

In clinical practice it is relatively easy to assess conditions of the eye that are related to the eye-optics. However, conditions that predominantly affect retinal or neuronal functioning are far more difficult to assess due to absence of a good screening device.

Temporal contrast sensitivity (TCS) can be used to assess pure retinal and neuronal functioning of the eye and is independent of optical deficits of the eye. TCS may therefore be used as a screening and or follow-up method for retinal diseases, such as glaucoma and RP. However, the TCS is dependent on the retinal illumination which may be affected by the pupil diameter and aging of the eye lens. For this reason the aim of this study is to investigate (and quantify) the effect of retinal illuminance, due to varying pupil diameter and light level, on the TCS outcome.

Study objective

The objective of this study is to determine the effect of retinal illuminance on TCS outcome.

Study design

Observational study. In 10 healthy volunteers the influence of light level on TCS outcome is observed.

Study burden and risks

For this study the pupil needs to be dilated, as is usual routine in ophthalmology. Risks are negligible.

Contacts

Public Academisch Medisch Centrum

NIN meibergdreef 47 1105 BA, Amsterdam NL **Scientific** Academisch Medisch Centrum

NIN meibergdreef 47 1105 BA, Amsterdam NL

Trial sites

Listed location countries

Netherlands

Eligibility criteria

Age

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

Inclusion criteria

normal healthy eyes without any history of ocular disease

Exclusion criteria

any presence or history of ocular pathologies or other disorders, especially retinal and/or neuronal disorders

Study design

Design

Study type: Observational non invasive		
Masking:	Open (masking not used)	
Control:	Uncontrolled	
Primary purpose:	Diagnostic	

Recruitment

NL	
Recruitment status:	Will not start
Enrollment:	10
Туре:	Anticipated

Ethics review

Approved WMO	
Date:	18-11-2011
Application type:	First submission
Review commission:	METC Amsterdam UMC

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 CCMO **ID** NL38513.018.11