# Collection of normative data of intracorneal reflectivity assessed by in vivo confocal microscopy.

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Collection of baseline features, by in vivo confocal microscopy, of the normal cornea with respect to corneal reflectivity and pachymetry.

Ethical reviewApproved WMOStatusRecruitment stoppedHealth condition typeOther condition

**Study type** Observational non invasive

# **Summary**

## ID

NL-OMON30301

#### Source

ToetsingOnline

#### **Brief title**

In vivo confocal microscopy of the normal cornea.

## **Condition**

Other condition

#### Synonym

Reflectivity of healthy cornea.

## **Health condition**

Geen: het onderzoek betreft de gezonde cornea.

## **Research involving**

Human

## **Sponsors and support**

**Primary sponsor:** Oogziekenhuis Rotterdam

**Source(s) of monetary or material Support:** Stichting Wetenschappelijk Onderzoek

Oogziekenhuis - Prof. Dr. H. J. Flieringa.

## Intervention

**Keyword:** confocal microscope, cornea, normative data

## **Outcome measures**

## **Primary outcome**

Mean and variance of corneal reflectivity and width.

## **Secondary outcome**

Reproducibility, inter-researcher variability, age-relatedness.

# **Study description**

## **Background summary**

Many studies have been, and still are, performed to monitor the effects of an intervention or corneal pathology with the help of in vivo confocal microscopy. Although, basic knowledge about the normal cornea should be the standard by which these observations must be compared, the data reported in literature are far from complete. The aim of this study is to get a more comprehensive set of fundamental data acquired by confocal microscopy of the normal cornea.

## Study objective

Collection of baseline features, by in vivo confocal microscopy, of the normal cornea with respect to corneal reflectivity and pachymetry.

## Study design

Cross-sectional survey.

## Study burden and risks

Volunteers will be recruited from patients visiting the Rotterdam Eye Hospital who have healthy corneas. Measurements will take place in course of a number of

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sessions, group 1: 4X (months 1, 3, 6, and 9), group 2: 4X (with 3 hour intervals on a single day). During the first session, in any case, measurements will be performed 3 times in succession (learning curve). During the following three sessions it may prove necessary to repeat measurements as well. On average, each session will last about 30 minutes. Pachymetry will be performed in the \*contact-mode\* with an immersion substance between the microscope\*s objective and the corneal surface. Application of a local anaesthetic (eye drops) will minimize discomfort. Risks are considered negligible. Participants do not benefit from this study.

## **Contacts**

#### **Public**

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## **Trial sites**

## **Listed location countries**

**Netherlands** 

# **Eligibility criteria**

#### Age

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

## Inclusion criteria

Healthy cornea, i.e.:

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- 1. Corneal epithelium is intact.
- 2. Stroma is clear.
- 3. Endothelium has a regular aspect.
- 4. No corneal scar(s).
- 5. No indication for inflammatory processes.
- 6. No previous surgical intervention.

## **Exclusion criteria**

Ocular trauma, Intraocular surgery.

# Study design

## **Design**

Study type: Observational non invasive

Masking: Open (masking not used)

Control: Uncontrolled

Primary purpose: Other

## Recruitment

NL

Recruitment status: Recruitment stopped

Start date (anticipated): 15-01-2007

Enrollment: 180

Type: Actual

# **Ethics review**

Approved WMO

Date: 09-01-2007

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 NL14518.078.06