Effect of optical quality on retinal thresholds

Gepubliceerd: 31-07-2017 Laatst bijgewerkt: 13-12-2022

To determine the influence of optical quality on perimetry for phakic and pseudophakic healthy and glaucoma patients. To determine the influence of CLE on perimetry and optical quality for PAC patients.

Ethische beoordeling	Niet van toepassing
Status	Werving nog niet gestart
Type aandoening	-
Onderzoekstype	Observationeel onderzoek, zonder invasieve metingen

Samenvatting

ID

NL-OMON21576

Bron
Nationaal Trial Register

Aandoening

Glaucoma

Ondersteuning

Primaire sponsor: University Medical Center Groningen (UMCG)
Overige ondersteuning: University Medical Center Groningen (UMCG)

Onderzoeksproduct en/of interventie

Uitkomstmaten

Primaire uitkomstmaten

Retinal sensitivity thresholds, measured by means of perimetry, as a function of ocular aberrations.

Toelichting onderzoek

Achtergrond van het onderzoek

The impact of optical aberrations on perimetry may be different in healthy eyes than in glaucoma patients. Although the visual loss for the last group is mainly due to the disease, it is important to understand which level of optical quality has an impact on perimetry for these patients and whether this may depend on the type of glaucoma.

Therefore, we propose the current study to further understand these factors. The main study parameter of this research is the relation between optical quality and perimetry in healthy and glaucoma eyes, both PACG and POAG. We intend to include both phakic and pseudophakic patients in each group. This is to cover a wider range of peripheral optical quality because current IOL technology increases peripheral aberrations.

The current study is also aimed to have additional outcome variables. CLE has been suggested as a therapy for PAC. However, there are no reports in the literature of the optical and visual performance of PAC patients after CLE. Therefore, an additional outcome variable is to study the effect of pseudophakia on ocular aberrations and perimetry for PAC patients. We propose to measure PAC patients undergoing CLE before and after the surgery, so that, we can relate how a change in optical quality translates into perimetry for the same subject.

Doel van het onderzoek

To determine the influence of optical quality on perimetry for phakic and pseudophakic healthy and glaucoma patients.

To determine the influence of CLE on perimetry and optical quality for PAC patients.

Onderzoeksopzet

n/a

Onderzoeksproduct en/of interventie

No

Contactpersonen

Publiek

L. Scanferla
Groningen
The Netherlands

Wetenschappelijk

L. Scanferla
Groningen
The Netherlands

Deelname eisen

Belangrijkste voorwaarden om deel te mogen nemen (Inclusiecriteria)

Phakic and pseudophakic POAG and PACG patients and phakic PAC patients scheduled for CLE, who visit the ophthalmology clinic at University Medical Center Groningen, that have provided the signed informed consent form and meet the inclusion-exclusion criteria. Healthy subjects between ages 50 and 75, who have provided the signed informed consent form and returned the questionnaire with results which do not indicate ophthalmic abnormalities.

Belangrijkste redenen om niet deel te kunnen nemen (Exclusiecriteria)

POAG patients

Visual acuity less than 0.8

Axial length lower than 23mm

History of closed or blocked angle

Myopia higher than 5D

For pseudophakic patients only, IOL model implanted different than Tecnis Monofocal, Model ZCB00

Phakic PACG patients

Visual acuity less than 0.8

Axial length higher than 23mm

For pseudophakic patients only, IOL model implanted different than Tecnis Monofocal, Model ZCB00

Phakic PCA scheduled for CLE

Visual acuity less than 0.8

Non-glaucomatous visual field loss

IOL model to be implanted different than Tecnis Monofocal, Model ZCB00

Axial length higher than 23mm

Healthy Subjects

Visual acuity less than 0.8

Corneal refractive (LASIK, LASEK, RK, PRK, etc.)

Any visual field loss

Intraocular pressure above 21 mmHg

Positive family history of glaucoma

Onderzoeksopzet

Opzet

Type:	Observationeel onderzoek, zonder invasieve metingen
Onderzoeksmodel:	Anders

Controle: N.v.t. / onbekend

Deelname

Nederland

Status:	Werving nog niet gestart
(Verwachte) startdatum:	01-01-2018
Aantal proefpersonen:	40
Type:	Verwachte startdatum

Ethische beoordeling

Niet van toepassing

Soort:	Niet van toepassing

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	NL6453
NTR-old	NTR6631
Ander register	UMCG Research Register : 201700546

Resultaten