Effect of improved intraocular lenses on contrast sensitivity tests.

Gepubliceerd: 20-11-2006 Laatst bijgewerkt: 18-08-2022

Implantation of aspheric IOL's results in higher visual performance than spheric IOL's.

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

Samenvatting

ID

NL-OMON23838

Bron
NTR

Verkorte titel
Aspheric IOL and contrast sensitivity

Aandoening

Each patient will receive a spherical IOL in one eye and an aspherical IOL in the fellow eye. The spherical IOL is normally used, the aspherical is not. The IOL's are CE approved.

Ondersteuning

Primaire sponsor: University Hospital Groningen, department ophtalmology
Hanzeplein 1
Postbus 30.001
9700 RB Groningen
The Netherlands
Tel: (+31)050-3612510
Fax: (+31)050-3611709

AMO (advanced medical optics) Groningen B.V.
Van Swietenlaan 5
9728 NX Groningen
Tel: (+31)050-5296600
Fax: (+31)050-5267860

Overige ondersteuning: SenterNovem

Onderzoeksproduct en/of interventie

Uitkomstmaten

Primaire uitkomstmaten

Improvement of the contrast sensitivity in the aspheric IOL.

Toelichting onderzoek

Achtergrond van het onderzoek

Refractive surgery is a surgical treatment, which aims for the correction of refractive errors. Nowadays, there is a strong tendency to perform refractive surgery in such a way that spherical aberration and other optical abnormalities after the operation are minimal. In patients with cataract, this can be achieved by replacing the cataracteus lens by a synthetic aspherical IOL (intra-ocular lens). An aspherical IOL contains negative spherical aberration which compensates the positive spherical aberration of the cornea.

Doel van het onderzoek

Implantation of aspheric IOL's results in higher visual performance than spheric IOL's.

Onderzoeksproduct en/of interventie

Two groups of 30 patients, each group tested with a specific intraocular lens (IOL) type in a spheric and aspheric design. In each patient a spherical IOL is placed in one eye and an aspherical IOL in the fellow eye. The IOL's used in the first combination are acrylic based and the IOL's used in the second combination are silicone based. Both combinations of IOL's are CE-approved. After implantation of the IOL in the second eye, the patient will perform two different contrast sensitivity tests at optimal refractive state of the eye and at -2D, -1D, +1D and +2D defocus. In this studie, the spherical aberration, corneal topography and stray light will also be measured.

Contactpersonen

Publiek

University Medical Center
Groningen (UMCG), Department Ophtalmology,
P.O. box 30.001
K.W. Gaalen, van
Hanzeplein 1
Groningen 9700 RB
The Netherlands
+31 (0)50 3619692

Wetenschappelijk

University Medical Center
Groningen (UMCG), Department Ophtalmology,
P.O. box 30.001
K.W. Gaalen, van
Hanzeplein 1
Groningen 9700 RB
The Netherlands
+31 (0)50 3619692

Deelname eisen

Belangrijkste voorwaarden om deel te mogen nemen (Inclusiecriteria)

Cataract in both eyes.

Belangrijkste redenen om niet deel te kunnen nemen (Exclusiecriteria)

1. Other ocular pathology as diabetic, macula degeneration and glaucoma;
2. Cylinder larger than 1,5 D;
3. Medication that influences the tear function of the eye;
4. Pathology that influences the tear production;
5. Prevalance of pathology between the two cataract operations;
6. Younger than 18 years;
7. Prevalance of senile dementia (MMSE<22).

Onderzoeksopzet

Opzet

Type:	Interventie onderzoek
Onderzoeksmodel:	Parallel
Blindering:	Dubbelblind
Controle:	Geneesmiddel

Deelname

Nederland

Status:	Werving gestart
(Verwachte) startdatum:	01-11-2006
Aantal proefpersonen:	60
Type:	Verwachte startdatum

Ethische beoordeling

Positief advies

Datum:	20-11-2006
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	NL800
NTR-old	NTR813
Ander register	: 2
ISRCTN	ISRCTN17058178

Resultaten

Samenvatting resultaten
N/A