

Comparison of Optos fundus photography versus fundoscopy for detecting retinal defects and retinal detachments.

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The aim of this study is to determine if retinal defects and detachments can be detected by fundus photographs taken with the Optos 200Tx fundus camera.

Ethical review	Approved WMO
Status	Will not start
Health condition type	Retina, choroid and vitreous haemorrhages and vascular disorders
Study type	Observational non invasive

Summary

ID

NL-OMON37870

Source

ToetsingOnline

Brief title

Comparison of Optos fundus photography versus fundoscopy.

Condition

- Retina, choroid and vitreous haemorrhages and vascular disorders

Synonym

retinal defect, retinal detachment

Research involving

Human

Sponsors and support

Primary sponsor: Universitair Medisch Centrum Groningen

Source(s) of monetary or material Support: Ministerie van OC&W

Intervention

Keyword: fundus photography, Optos, retinal defect, retinal detachment

Outcome measures

Primary outcome

The proportion of retinal defects/detachments detected on Optos fundus photographs. The gold standard is a confirmed defect or detachment detected with fundoscopy performed by an ophthalmologist.

Secondary outcome

none

Study description

Background summary

Retinal defects and detachments can be seen in a variety of retinal pathology: posterior vitreous detachment (PVD), macular pucker or after a blunt trauma to the eye. PVD is by far the most common cause. Patients with a PVD present with complaints of floaters and light flashes. In the normal aging process, the vitreous gel changes its consistency - seen by the patient as floaters - and loses its usual shape. As a result, it begins to move away from the retina at the back of the eye towards the centre of the eye. As it moves, it can pull on the retina and then a patient sees flashes of light. In some but not all patients, a tear in the retina is torn at the moment of the PVD. Tears can be repaired with laser photocoagulation. If not timely treated, fluid cumulates under the retina and this results in a retinal detachment. Surgery is needed to reattach the retina. If surgery is delayed for whatever reason, the probability of a beneficial outcome decreases rapidly.

As PVD is quite common, screening - by fundoscopy - for retinal defects and detachments is a significant part of the workload of the ophthalmologist. It would be very efficient if this screening could be deferred to auxiliary personnel. Unfortunately, fundoscopy is difficult and requires a lot of experience. Recent advances in technology yielded the Optos 200Tx non-mydratric fundus camera. This camera is able to photograph 200 degrees (essentially the entire) of retina at once. Thus, this camera might assist auxiliary personnel in screening for retinal defects/detachments in patients with complaint that

indicate the presence of a PVD (light flashes and floaters).

Study objective

The aim of this study is to determine if retinal defects and detachments can be detected by fundus photographs taken with the Optos 200Tx fundus camera.

Study design

Cross-sectional observation study in a clinical setting, the outpatient department of the department of Ophthalmology, UMCG.

Study burden and risks

A single fundus photograph will be taken with the Optos 200Tx non-mydratric fundus camera during a regular care visit (because of complaints of light flashes and/or floaters) to our outpatient department. The mydriasis (instillation of drops that dilate the pupil) is part of our routine eye care and is necessary to perform fundoscopy (the Optos does not require mydriasis).

Contacts

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Trial sites

Listed location countries

Netherlands

Eligibility criteria

Age

Adults (18-64 years)

Elderly (65 years and older)

Inclusion criteria

All patients aged 18 or above complaining of light flashes and floaters

Exclusion criteria

Age below 18 years.

Absence of informed consent

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: 300

Type: Anticipated

Ethics review

Approved WMO

Date: 03-08-2012

Application type: First submission

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	NL40015.042.12