

# Pathogenesis, diagnostics and complications of uveitis in childhood.

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First, to develop a diagnostic method for non-infectious uveitis in childhood. Second, to analyze iris and ciliary body tissues of children with uveitis on the presents of inflammatory infiltrate. The results of this study will contribute in the...

<b>Ethical review</b>	Approved WMO
<b>Status</b>	Recruitment stopped
<b>Health condition type</b>	Anterior eye structural change, deposit and degeneration
<b>Study type</b>	Observational invasive

## Summary

### ID

NL-OMON33636

### Source

ToetsingOnline

### Brief title

Uveitis in childhood

### Condition

- Anterior eye structural change, deposit and degeneration
- Autoimmune disorders

### Synonym

inflammation of the uvea, intraocular inflammation

### Research involving

Human

### Sponsors and support

**Primary sponsor:** Universitair Medisch Centrum Utrecht

**Source(s) of monetary or material Support:** 1) Dr. F.P. Fischer-Stichting: Postbus 2756;3800 GJ Amersfoort;T 033-4552620;fischer.stichting@hetnet.nl De stichting heeft tot doel het bevorderen van de oogheelkunde. Zij tracht haar doel te bereiken door het verlenen

van geldelijke bijdragen ten behoeve van wetenschappelijk onderzoek; patiëntenzorg en opleiding op het terrein van de oogheelkunde en door het openstellen van haar wetenschappelijke collectie. 2) Stichting Nederlands Oogheelkundig Onderzoek (SNOO) Adrianaweg 14; 6523 MV Nijmegen.

## Intervention

**Keyword:** aqueous humor, child, juvenile idiopathic arthritis, uveitis

## Outcome measures

### Primary outcome

1. Protein profiles in the aqueous humor of children with non-infectious uveitis.
2. Cells of the immune system in tissue fragments of iris and ciliary body of children with uveitis.
3. Endothelial cell density (endothelial cell loss) in children with a glaucoma implant (tube) for secondary glaucoma due to uveitis.

### Secondary outcome

na

## Study description

### Background summary

Specific knowledge about cause and treatment of uveitis in childhood is for the present inadequately available in literature since uveitis in childhood is rare.

### Study objective

First, to develop a diagnostic method for non-infectious uveitis in childhood. Second, to analyze iris and ciliary body tissues of children with uveitis on the presents of inflammatory infiltrate. The results of this study will contribute in the diagnostics of uveitis in childhood and in clarifying the pathogenesis of uveitis in childhood.

Third, to determine the long-term effect of glaucoma valve (tube) implantation on corneal endothelial cells in children with uveitis. The results of this study shall contribute to the better management of secondary glaucoma due to uveitis by children.

## **Study design**

We will analyze the relation between protein profiles in the aqueous humor and the type of uveitis. Furthermore, tissue fragments of the iris and ciliary body of children with uveitis, who are operated on for secondary glaucoma, will be analyzed on the presence of inflammatory infiltrates. The tissue characteristics will be related to the cause of the intraocular inflammation and visual prognosis.

As third part of the study we will investigate and evaluate the long-term effects of glaucoma valve (tube) implantation in children with uveitis. The endothelial cell density will be prospectively evaluated by making of endothelial pictures once a year in children with a glaucoma implant and in a control group children with uveitis without the history of an eye operation.

## **Study burden and risks**

The treatment and therapy of the patients remains unchanged. Material will only be collected during a therapeutically necessary glaucoma or cataract surgery. Aqueous humor and possibly tissue fragments, which otherwise would be lost during surgery, will be collected. The cataract or glaucoma surgery will remain unchanged. When the child is under general anesthesia a venous puncture (10ml) under sterile circumstances will be performed. The patient will not notice anything due to the anesthetics. The endothelial cell density will be measured once a year during 3 years in children with uveitis and a history of glaucoma surgery and children with uveitis without the history of glaucoma and eye operation. Endothelial cell density measurement is painless and non-invasive. It takes about 5 minutes a time. During the measurement the child sits on a chair with his/ her chin on the chin-rest and looks at a green point. The device makes the picture of a corneal endothelial cells. This device does not make use of light or sound which could scare a child.

## **Contacts**

### **Public**

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## Scientific

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## Trial sites

### Listed location countries

Netherlands

## Eligibility criteria

### Age

Adolescents (12-15 years)

Adolescents (16-17 years)

Children (2-11 years)

### Inclusion criteria

Uveitis diagnosed before the age of 16 years and cataract or glaucoma surgery

### Exclusion criteria

uveitis diagnosed after the age of 16 years

## Study design

### Design

Study type: Observational invasive

Intervention model: Other

Allocation: Non-randomized controlled trial

Masking: Open (masking not used)

Control:	Active
Primary purpose:	Basic science

## Recruitment

NL	
Recruitment status:	Recruitment stopped
Start date (anticipated):	05-03-2009
Enrollment:	110
Type:	Actual

## Ethics review

Approved WMO	
Date:	10-02-2009
Application type:	First submission
Review commission:	METC Universitair Medisch Centrum Utrecht (Utrecht)

## 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	NL25561.041.08