

25 September 2019

Eye screening and care: treatment pathways and professional roles along that pathway



Presenters: Dr Kris Rallah-Baker and Dr Madeleine Adams

This webinar is brought to you by the Australian Indigenous HealthInfoNet and
The Fred Hollows Foundation

**If you are having technical difficulties check the troubleshooting tips in the chatbox*

*** This webinar is being recorded and will be added to our website. It will include any typed comments that you contribute*

Acknowledgment of Country

**The Australian Indigenous HealthInfoNet
would like to acknowledge
the traditional custodians of the lands across Australia
that we are meeting upon
and pay our respects to Elders past and present.**



Who Are We?

Dr. Kristopher Rallah-Baker

Dr. Madeleine Adams



Australian Eye Health: Who Does What and How?

Urban vs Rural/Remote

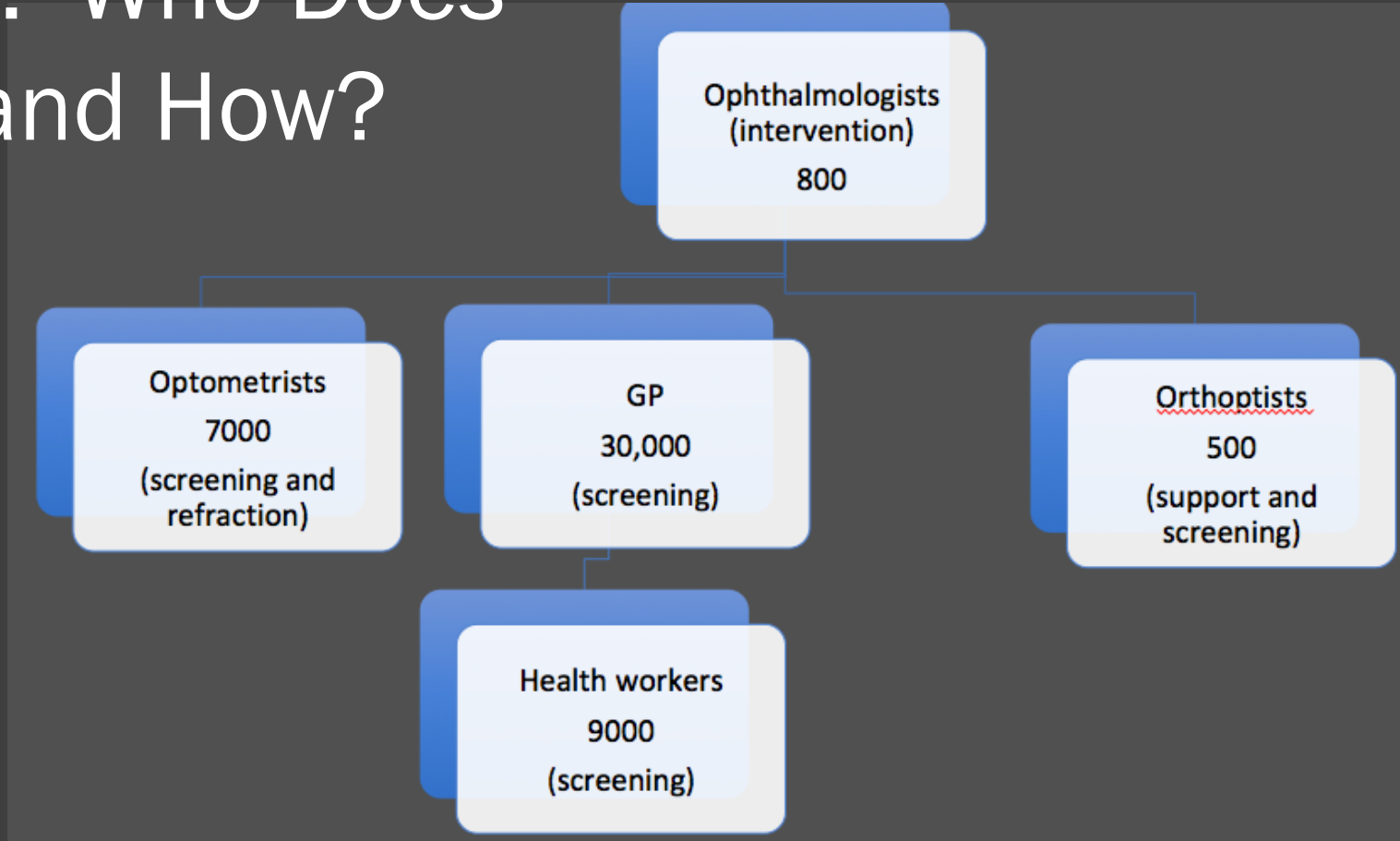
Activities and funding differ
by jurisdiction

Roles of GP, health worker,
orthoptist, optometrist and
ophthalmologist (eye
doctors) equivalent
Nationally

- Federally funded services
- State services
- NGO services (FHF, ACHOS, IDEAS van, LOV, Brian Holden Institute)



Australian Eye Health: Who Does What and How?



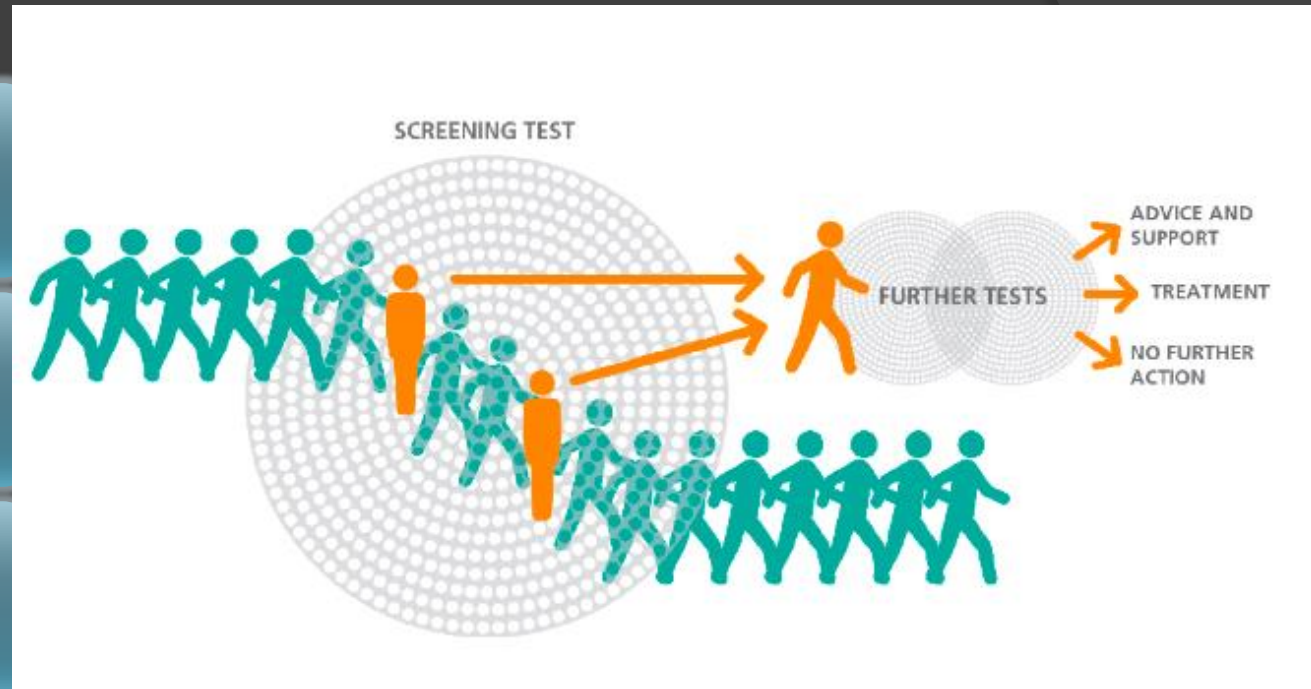
WHO definition of Screening

presumptive identification of unrecognized disease

in an apparently healthy, asymptomatic population

by means of tests, examinations or other procedures

that can be applied rapidly and easily to the target population



Screening

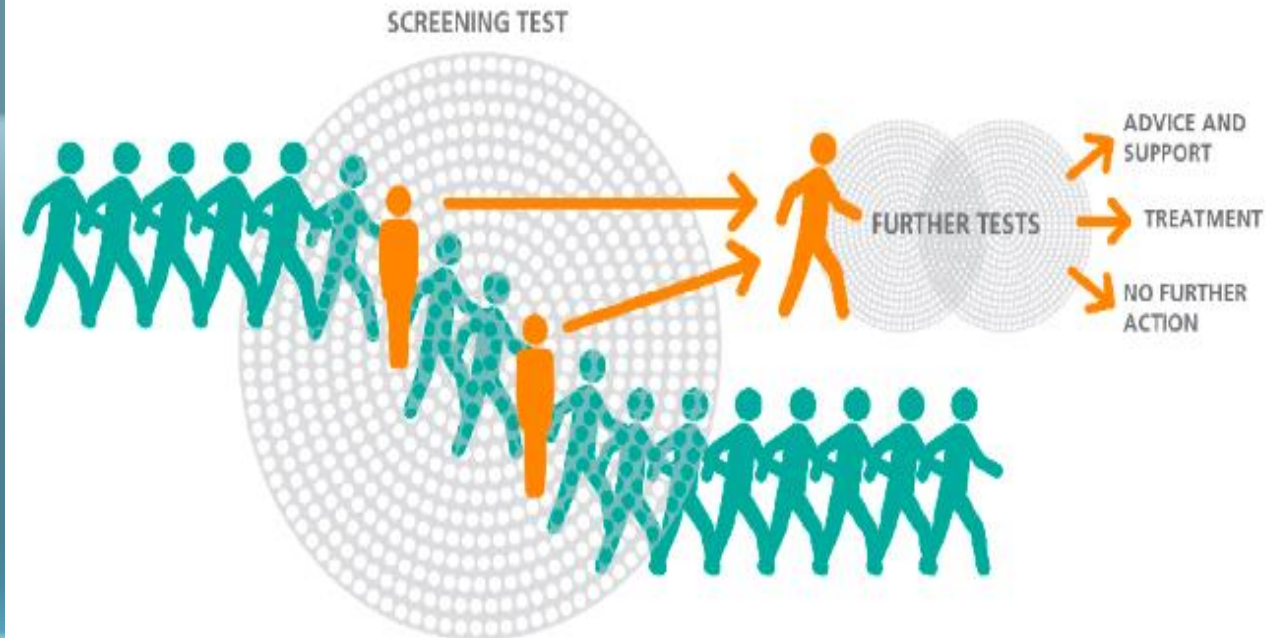
At each stage of the screening process, people can make their own choices about further:

tests

treatment

advice

support



Eye Screening works...

Diabetic eye disease screening in UK – significant effect

KeepSight program – Australia:

Optometrists, orthoptists, ophthalmologists, Aboriginal health workers, and GPs who do Diabetic Retinopathy (DR) screening, as well as diabetes health professionals

Patients receive recall and reminder SMS to prompt them to return for further eye screening



KeepSight



diabetes
australia

1

REGISTER AS A
PROVIDER



2

CONDUCT EYE
CHECKS



3

RECORD
A VISIT



Examples of Screening Programs

IDEAs Van in Qld/Vic



Lions Outback Vision in WA



VOS in NT

Brien Holden Institute

The Roles of the Health Worker, Orthoptist, Optometrist and Ophthalmologist



Health Worker –
multiple avenues for
training with some
on-the-job and
formal certificates

The Roles of the Health Worker, Orthoptist, Optometrist and Ophthalmologist



Optometrist

Eye care professionals who examine the eyes and visual systems to detect vision changes and diagnose eye diseases

Bachelor of Applied Science

The Roles of the Health Worker, Orthoptist, Optometrist and Ophthalmologist



Orthoptist

Allied health care profession
dedicated to the eye care
profession

Bachelor of Health Sciences/
Master of Orthoptics – 4 Years
Master of Orthoptics – 2 Years

The Roles of the Health Worker, Orthoptist, Optometrist and Ophthalmologist



GP - General Practitioner
Medical Degree and min 4
years post graduate
training (Fellowship with
the Royal Australian
College of General
Practitioners)



THE ROYAL AUSTRALIAN
COLLEGE OF
GENERAL PRACTITIONERS



Australian
College of
Rural & Remote
Medicine

WORLD LEADERS IN RURAL PRACTICE

The Roles of the Health Worker, Orthoptist, Optometrist and Ophthalmologist



Ophthalmologist

Medical Degree and min 7 years post graduate training (5 with the Royal Australian and New Zealand College of Ophthalmologists)

Require referrals from optom or GP

Optometrist or Ophthalmologist?



Ophthalmologist – Specialist Medical doctors with training in ophthalmic medicine and surgery



Optometrists – primary degree is in optics; therapeutics training to allow basic dispensing of limited range of medications

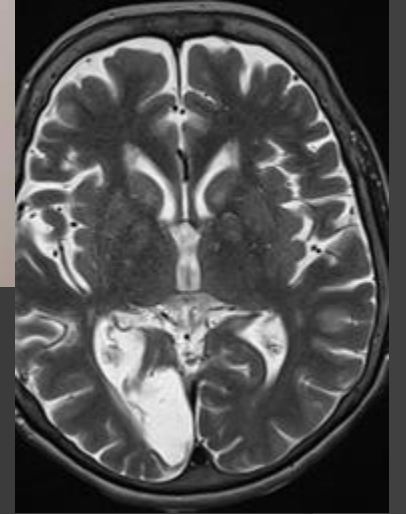
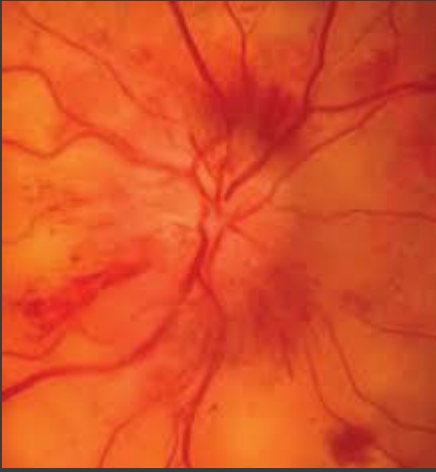
Refractive Error



Most common cause of visual impairment

Optometrists assess and provide glasses

Can significantly improve vision



© MAYO FOUNDATION FOR MEDICAL EDUCATION AND RESEARCH. ALL RIGHTS RESERVED.

The Diabetic Eye

20x risk blindness



What is the threat to vision?

Untreated proliferative diabetic retinopathy PDR
– risk of severe visual loss ~40% in 12 months

Untreated maculopathy – risk of moderate visual loss ~25%

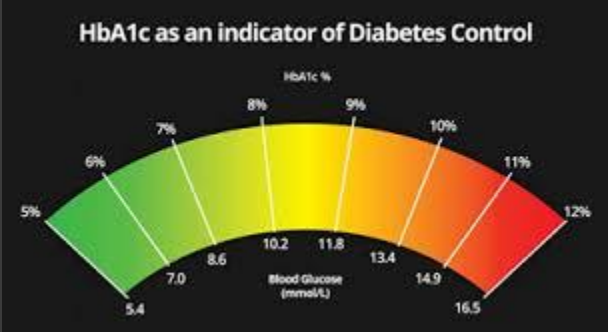
There are effective treatments for both now...it is preventable blindness



40% of Aboriginal and Torres Strait Islander adults with diabetes have some form of DR

10% have vision threatening DR

Risk Factors



When to screen

What % have DR on presentation of DM?

- T1 – 0
- T2 – 30%

What % have DR at 15 years?

- T1 – 90%
- T2 – IDDM 90%, NIDDM 50%
- 5 – 10% progress from no DR to DR each year – so need screening

Screen:

- T1 – 5 years after diagnosis
- T2 – immediately then yearly (NHMRC is 2 yearly unless ATSI, yearly)

How Screening is Undertaken



Two main cameras in use – the DRS and the CR-2

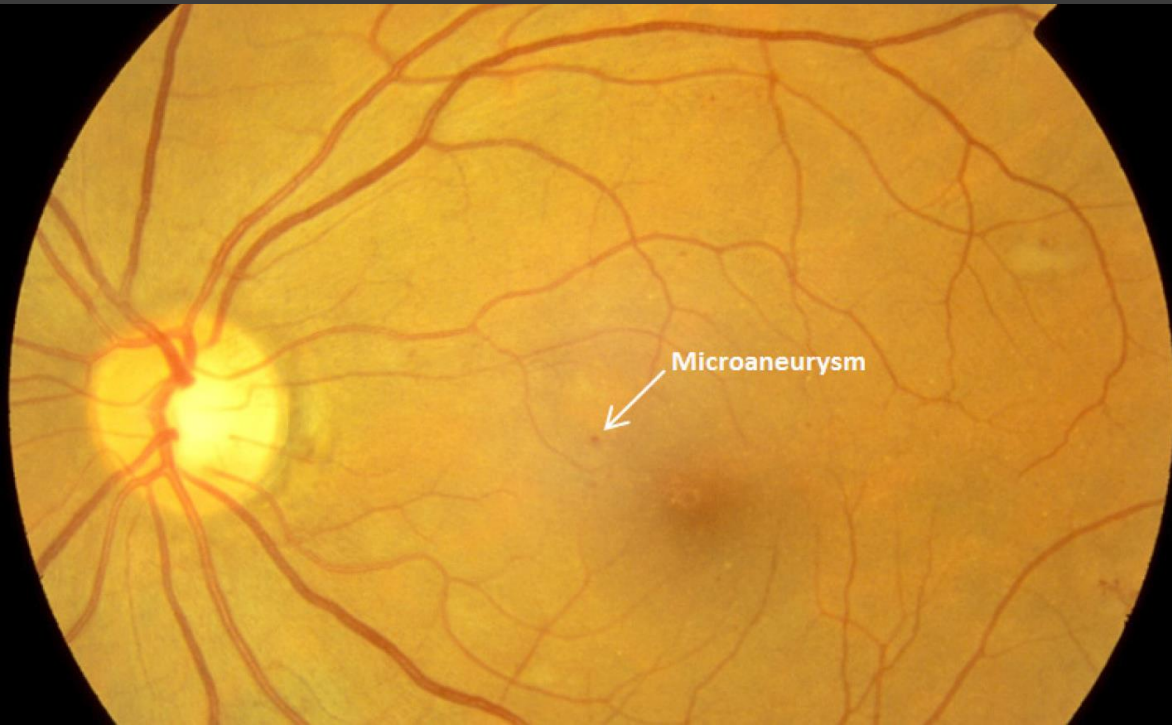
Each has its own advantages and disadvantages

Both require some degree of skill on operator's part

Many different systems, some working better than others

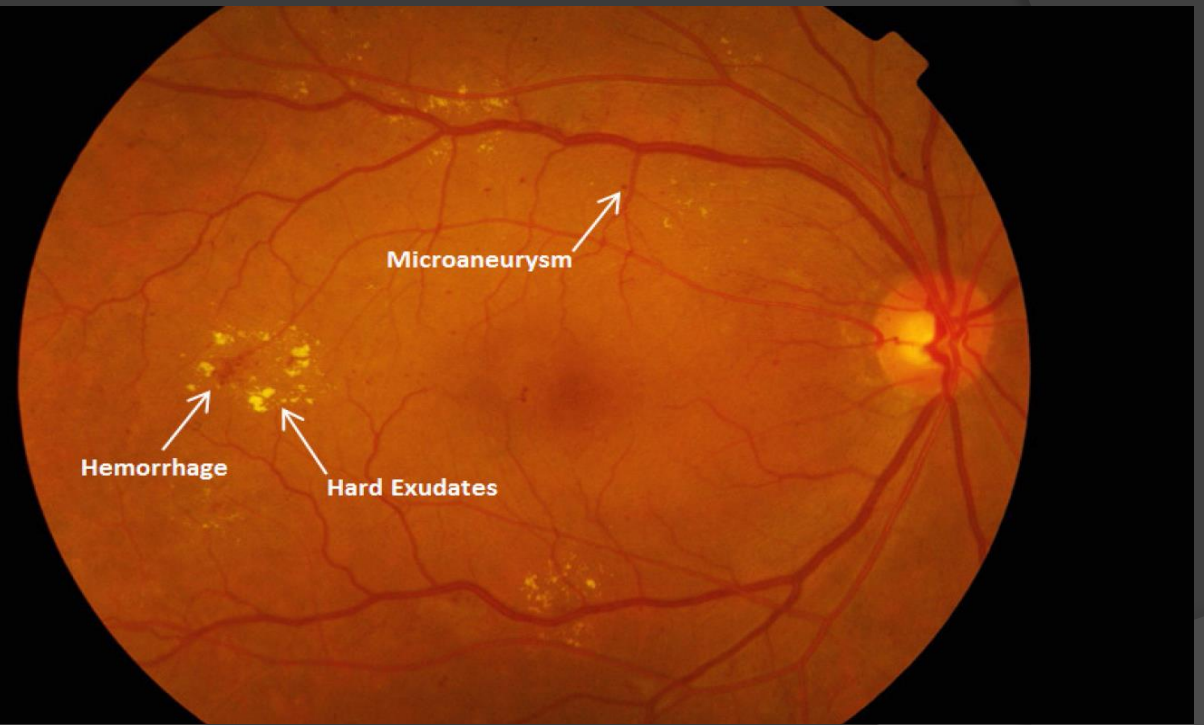
Main issue is who "reads" the images
Direct Examination

Mild



<1%/yr -> PDR

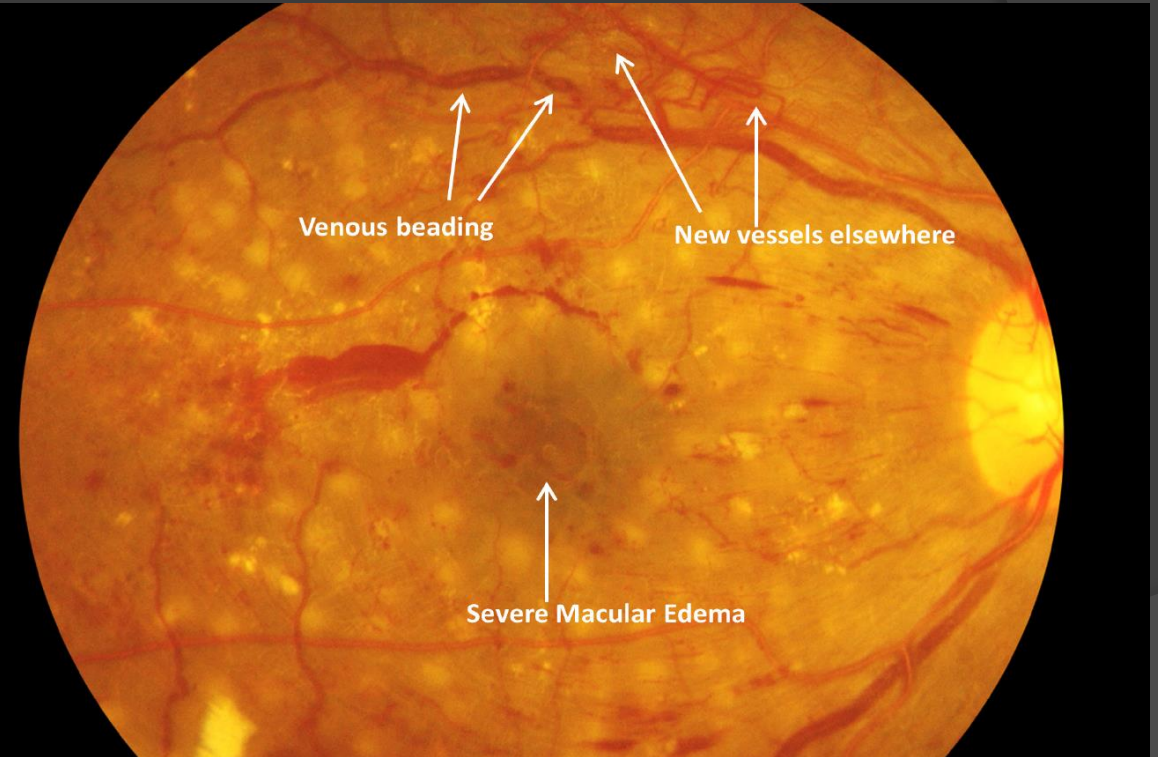
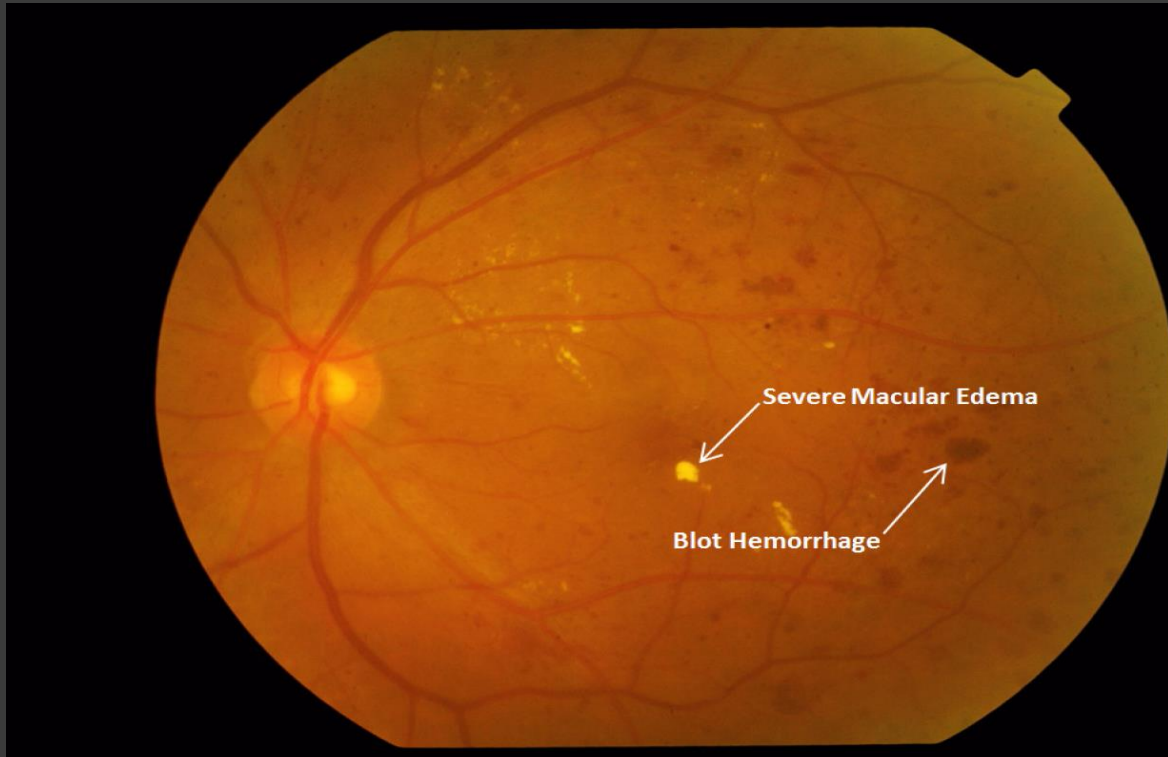
Moderate



3%/yr -> PDR

Severe

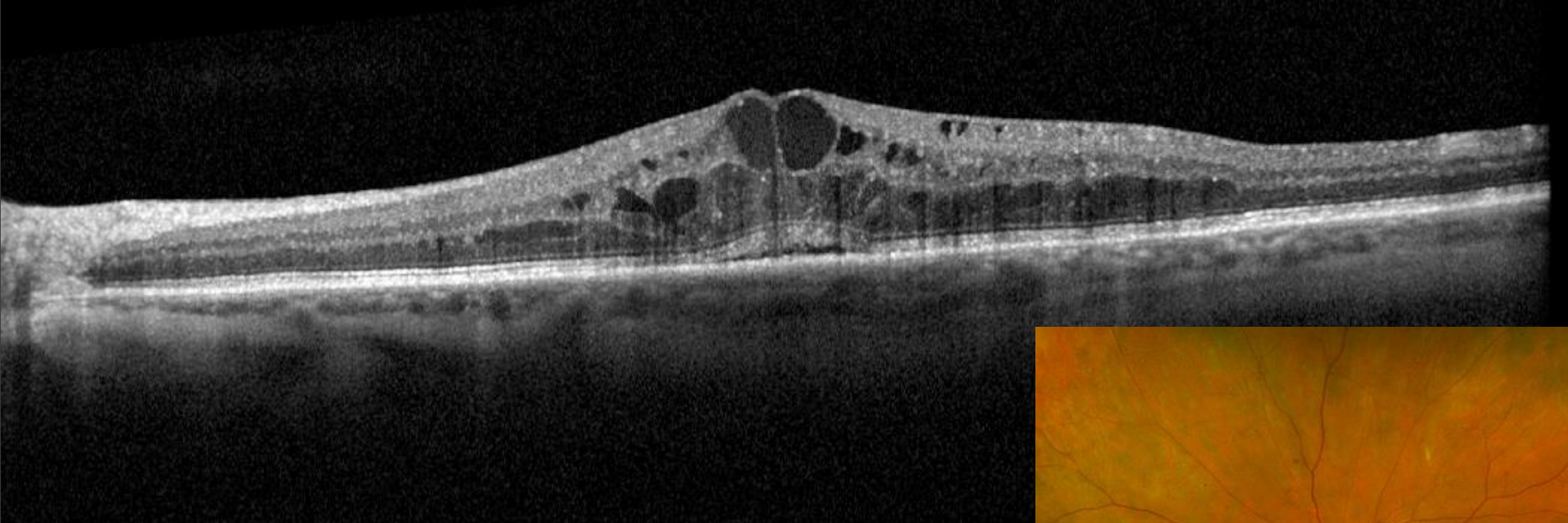
Proliferative (PDR)



50%/ yr -> PDR

40%/yr visual loss

Diabetic Macular Oedema



What to tell our patients:

If you control your blood sugar
(Hba1c <7% or 53 mmol/ mol) you:

- Reduce risk of developing DR by 75%
- Reduce progression by 50%

If you control blood pressure
(<130/80) you:

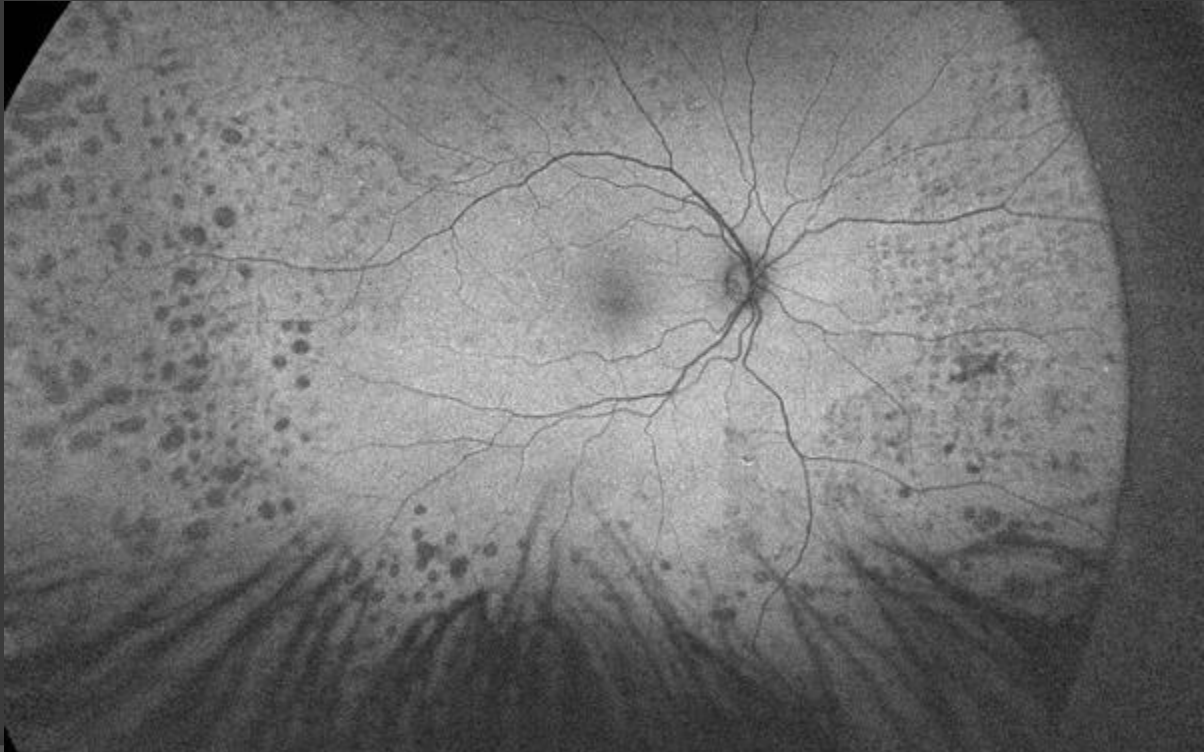
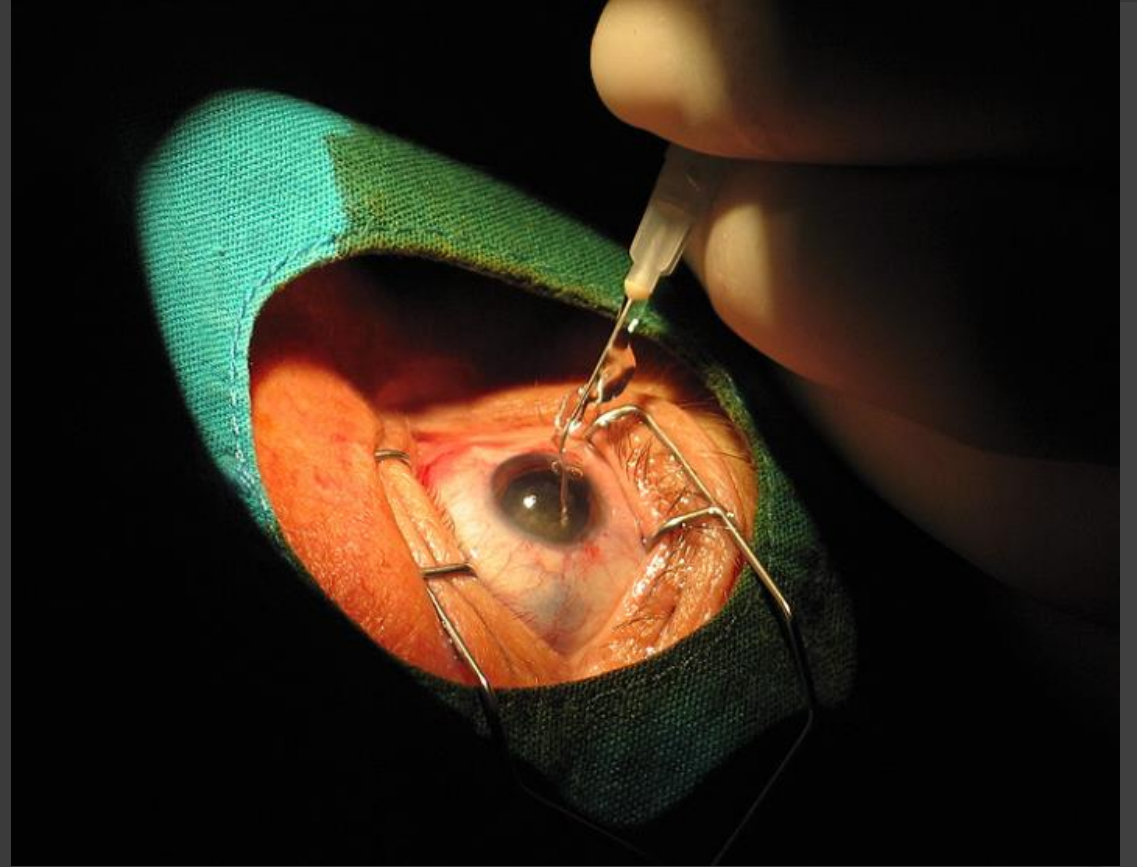
- Reduce progression by 50%

Stop Smoking

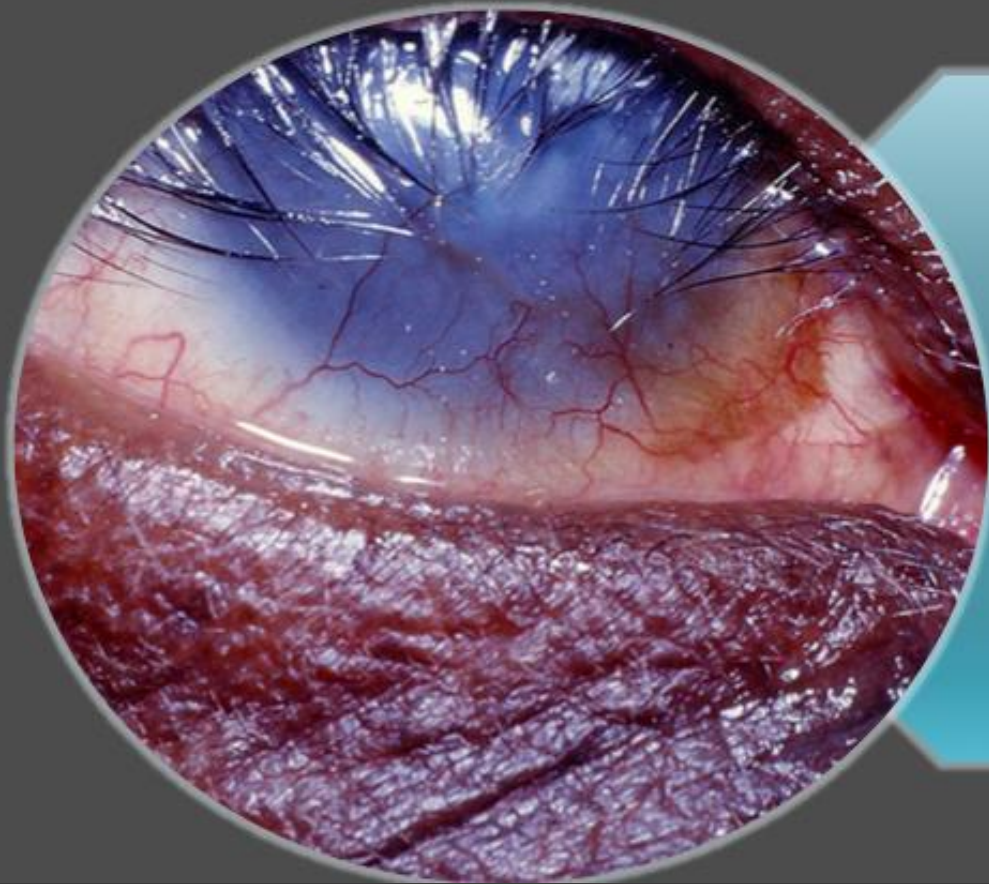
T2 DM - Fenofibrate

In pregnancy – see ophthalmologist -
planning pregnancy, during and after
(risk persists for 18 months)

Treatments



Trachoma and Treatment



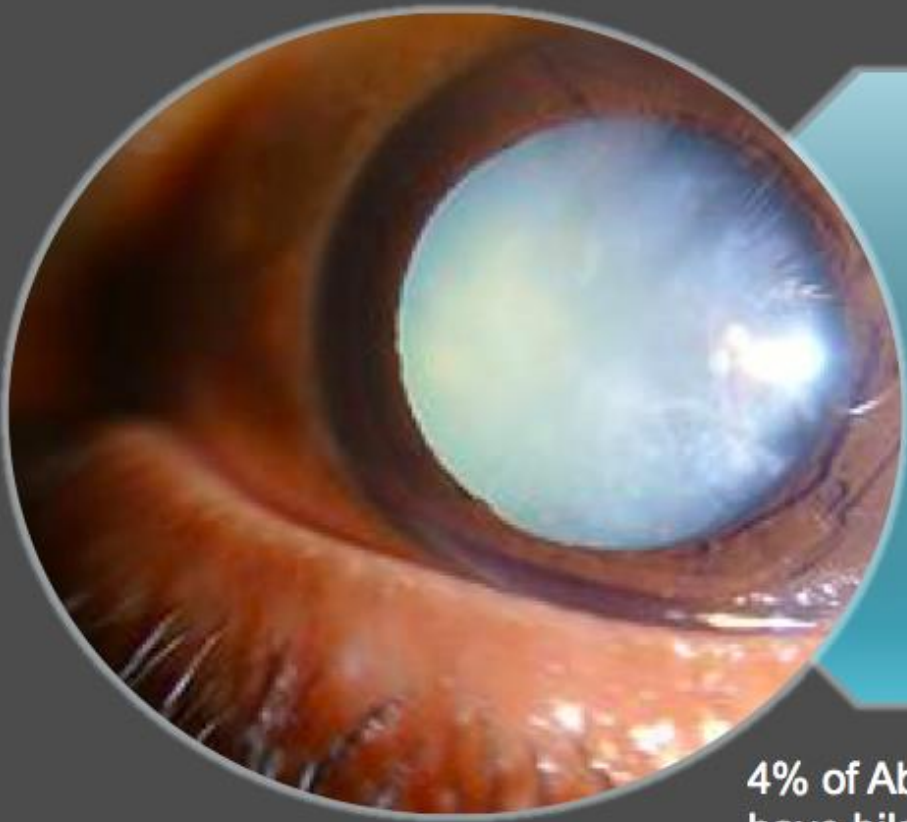
WHO SAFE guidelines:

- Surgery
- Antibiotics
- Face Washing
- Environment

Trachoma Stages



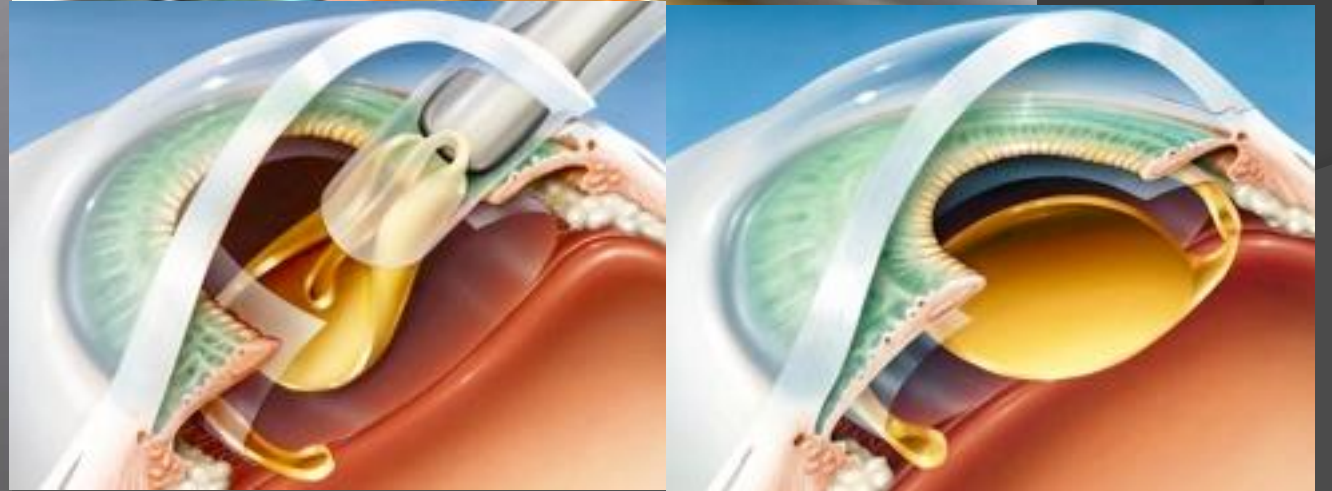
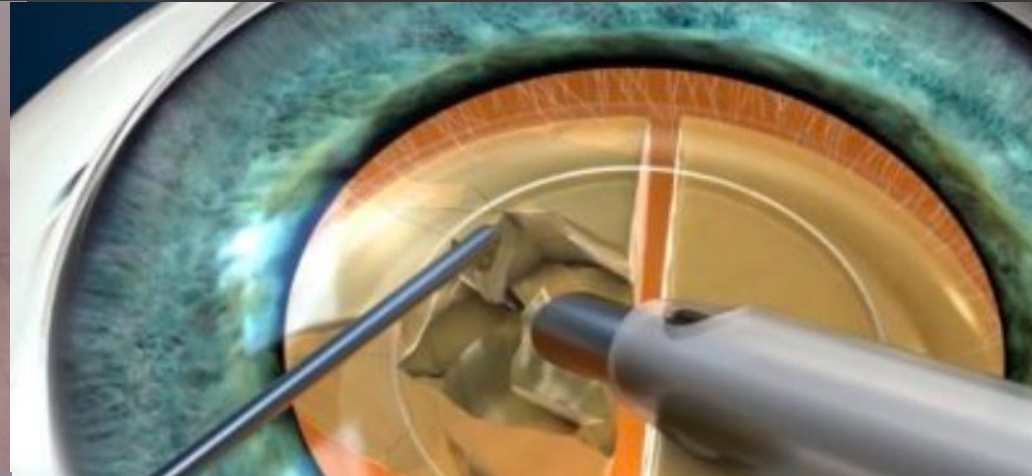
Cataracts



Clouding
of the lens

4% of Aboriginal and Torres Strait Islander adults
have bilateral or unilateral vision impairment due to
cataracts

Microsurgical cataract treatment



More information

Check out HealthInfoNet's Eye Screening and Care resources:



Short video

Fact sheet

Infographic



Available from HealthInfoNet's Eye Health Portal:
<https://healthinfonet.ecu.edu.au/learn/health-topics/eye-health/>

Contact details

Guest Presenters

Dr Kris Rallah-Baker: kristopher_rallah-baker@hotmail.com

Dr Madeleine Adams: madeleine.adams@me.com

The Australian Indigenous HealthInfoNet

Tamara Swann: t.swann@ecu.edu.au

Avinna Trzesinski: a.trzesinski@ecu.edu.au

