

Retinopathy of Prematurity - Patient information

What is Retinopathy of Prematurity (ROP)?

Retinopathy of prematurity is a condition of the eyes that effect premature and low birth weight infants. The eye is like a camera with lenses at the front and a light sensitive layer (called the retina) at the back. ROP affects the retina, in three ways. Firstly new blood vessels grow out of the retina, then scar tissue forms and finally retinal detachment occurs. When the retina becomes detached it loses contact with its blood supply and stops working.

The condition was first described by a Dr Terry in 1942, and linked to oxygen usage by Dr Campbell in 1950.

What are the risk factors for ROP?

- Premature birth <28 wks;
- Low birth weight < 1000gm
- O2 use / intubations
- Haemorrhage / transfusions
- Multiple pregnancy
- Infections

What is ROP screening?

If you child has high risk characteristics, they will have their eyes checked regularly, from 4-6 weeks old for about 3 months. It is very important that if you move hospitals in this time that eye screening is continued. Screening every two weeks is offered to all infants under the weight of 1500gm or under the age of 31 weeks gestation.

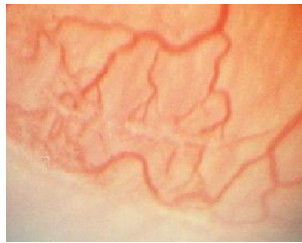
How is ROP classified?

ROP is classified into 4 stages:

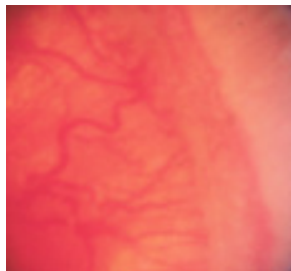
Stage I is the development of a demarcation line between healthy and non healthy retina.



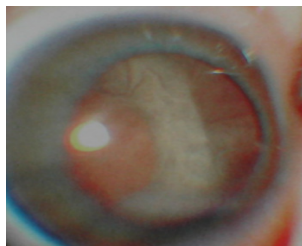
Stage II is the formation of a ridge of tissue along the line



Stage III is the vascularisation of the ridge



Stage IV is the development of a partial retinal detachment; Stage V is the development of a full retinal detachment.



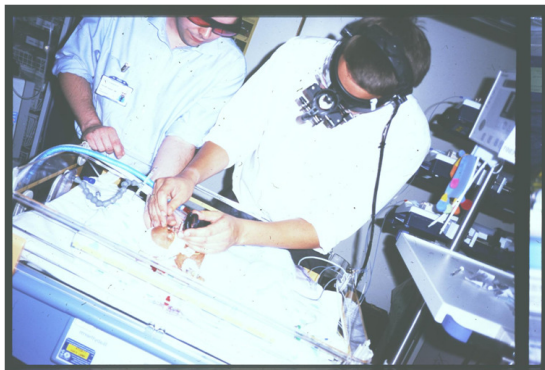
Active disease is also called Plus disease, with dilation of blood vessels in the retina and at the front of the eye.

Does my child need to treatment of ROP?

In many children early ROP (stage I and II) will stabilize by itself and no treatment is needed. However in more severe cases a 'threshold ' is reached whereby the eye is likely to have serious problems if it is not treated. With active plus disease and stage II laser treatment can also be helpful.

What is the treatment for ROP ?

Laser treatment is the most wide spread treatment. The child is anaesthetised and laser is shone onto the retina with a special headset. The damaged retina is treated. This takes around an hour to complete. Eye surgery in specialised centers, may be useful, in very severe cases.



ROP

Laser treatment for

Are there any long term problems?

Generally we are happy with the results of laser surgery however any child with ROP can have long term visual problems and should have regular eye checks at the hospital. The problems typically include, squint (20%), short sightedness', glaucoma (10%) colour vision loss, and sometimes retinal detachment. However most gain good visual function with timely treatment.

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