

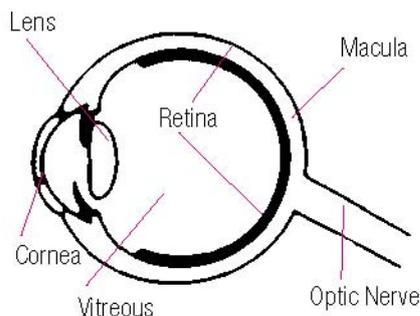


# RETINOPATHY OF PREMATURITY

Retinopathy of Prematurity (ROP) is an eye problem that occurs in some, but not all premature babies. If it does develop, it is usually mild, and goes away by itself without causing any vision problems.

## What is ROP?

ROP is an eye problem that affects the tissue at the back of the eye called the retina. The retina is the part of the eye that senses light and sends signals to the brain so that we can see.



In some very premature babies the blood vessels of the retina do not develop properly and grow the wrong way, this is known as retinopathy of prematurity (ROP).

## Why do premature babies get ROP?

We do not understand why some babies develop ROP and others do not. Research is underway to try to understand why ROP occurs.

In the past ROP was more common and was linked to use of oxygen. Now, the supply of oxygen to premature babies is very closely monitored and the amount of oxygen given to babies is carefully calculated and controlled. As a result, ROP is less common but it still occurs.

It is well known that the smallest babies have the highest risk of developing ROP. Serious ROP is very rarely seen in babies weighing more than 1250 grams at birth.

## How will I know if my baby has ROP?

At the Women's, your baby's eyes will be tested by specialist nurses using a special digital camera (a Retcam™) to take images of your baby's retina. These images are then reviewed by an eye specialist (ophthalmologist) who will check if your baby has ROP and decide if and when further testing is needed.

## What happens during the ROP test?

- About an hour before the examination, we will put drops in your baby's eyes. The drops will make your baby's pupil bigger. This allows pictures to be taken of the retina so we can assess the presence and/or degree of ROP.
- Your baby will be swaddled to make them comfortable.
- We will also give your baby sucrose to help with any pain or discomfort they may feel. For more information see the fact sheet *Sucrose for pain relief in newborn babies*
- Right before the examination we will put drops in your baby's eyes that contain local anaesthetic.
- Your baby's eyelid will be held open with an eye retractor. This can be uncomfortable but it is important that the eyelids are out of the way so we can get good quality photographs.
- A contact gel (Polygel) is applied to the surface of your baby's eye.
- The Retcam lens, which does not touch the eye is then used to take images of the retina.

### How long does the test take?

The test takes about 15 minutes from start to finish. The eye retractor is used for less than two minutes.

Let your bedside nurse know if you would like to be present for your baby's test.

### Will my baby be in pain?

Your baby may cry because the eye retractors are uncomfortable. Swaddling, local anaesthetic eye drops and sucrose are used to help reduce any discomfort for your baby.

### When will my baby be tested?

If your baby weighs less than 1250 grams at birth or was born before 30 weeks they will be tested for ROP. Testing will continue every two weeks whether ROP is present or not. If more severe stages of ROP are seen, your baby will be tested weekly until the ROP resolves.

Screening for ROP stops when the retina is developed and matured, which is usually about the time that they were due to be born.

### What happens after the ROP test?

All Retcam images taken by the ROP nurses will be reviewed and assessed by an ophthalmologist. If the ophthalmologist feels it is necessary they will examine your baby's eyes.

The results of all eye examinations and tests will be documented in your baby's history. The medical team, ROP nurses or bedside nurses will talk to you about your baby's results.

### If my baby has ROP, what happens?

In most cases, ROP will resolve by itself. Laser treatment may be required to treat severe ROP. The medical team or ophthalmologist will discuss this treatment with you if your baby needs it.

### Who can I talk to about ROP?

The nurse or doctor taking care of your baby are always the first people to ask. If they cannot answer your questions they will arrange a time for you to discuss your baby's eye problem with the ophthalmologist.

### Will my baby need to have eye checks after leaving hospital?

All babies who had ROP screening while in hospital will be offered an eye examination at the Melbourne Children's Eye Clinic located at the Royal Children's Hospital.

The eye examination is to check if your baby has any ongoing eye condition that may need glasses for clear vision.

It is strongly recommended that you make sure your baby has an eye examination at about one year of age.

### Remember

Only some babies with a low birth weight (less than 1250 grams) develop ROP and in most of these babies the ROP is mild and goes away without any treatment.

Only a few babies develop severe ROP and treatment is successful in most cases.

### For more information

#### health.vic

For detailed information about ROP visit this Victorian government health website.

Search for Retinopathy of Prematurity (ROP)  
[www2.health.vic.gov.au](http://www2.health.vic.gov.au)

#### Newborn Intensive Care Unit

Royal Women's Hospital  
Cnr Flemington Rd and Grattan St  
Parkville VIC 3052  
T: (03) 8345 3400

#### Special Care Nursery

The Women's at Sandringham  
193 Bluff Rd  
Sandringham VIC 3191  
T: (03) 9076 1572