

# Retinopathy of Prematurity (ROP) Screening information for parents.

Neonatal Unit

You will have been given this information leaflet because your baby fits the criteria for Retinopathy of Prematurity (ROP) screening. This will help you understand what ROP is and the screening procedure.

## Why screen premature babies?

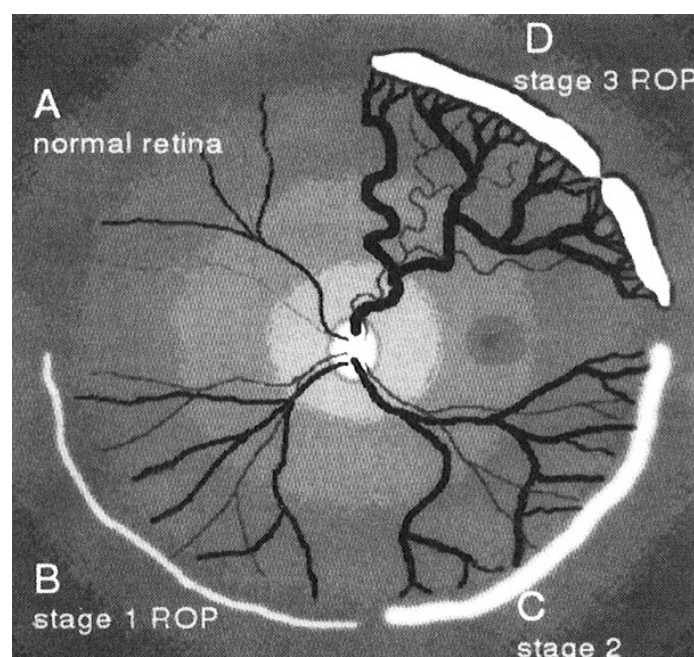
Premature babies are at risk of an eye condition called Retinopathy of Prematurity, often shortened to ROP.

All babies weighing less than 1501 grams at birth or are less than 32 weeks gestation will have their eyes examined.

## What is Retinopathy of Prematurity

The retina is the delicate tissue lining the back of the inside of the eye. The retina detects light and allows us to see. ROP is an eye condition which affects the blood vessels of the retina.

Below is a diagrammatic view of the retina as seen through the pupil. The diagram shows how ROP develops.



The prevention of infection is a major priority in all healthcare and everyone has a part to play.

- Please decontaminate your hands frequently for 20 seconds using soap and water or alcohol gel if available
- If you have symptoms of diarrhoea and/or vomiting, cough or other respiratory symptoms, a temperature or any loss of taste or smell please do not visit the hospital or any other care facility and seek advice from 111
- Keep the environment clean and tidy
- Let's work together to keep infections out of our hospitals and care homes.

For the purpose of this diagram all ROP stages are shown in small sections as though they are in one eye.

The white oval in the centre is the optic nerve. The dark area towards the right of it is known as the macula. The macula is the part of the eye that allows us to see fine detail. The grey lines are the arteries, and the black lines are the veins.

View the diagram starting at letter A.

At A the blood vessels pointing towards A are normal.

At B there is a white line at the growing tips of the blood vessels - stage 1 ROP. The white line is the ROP.

At C the line has become thicker - stage 2 ROP.

At D the line is very much thicker because of the formation of very fine abnormal new blood vessels.

At D you can also see that the arteries have become tortuous (wiggly) and the veins have become much fatter. Both of these signs are known as plus disease and are the signs that the eye needs treatment.

## How common is ROP?

ROP is common in premature babies affecting about 65% of babies less than 1251g birth weight. Mild ROP of stages 1 and 2 are very common and settles on its own without treatment. Only a small number of babies develop stage 3 and plus disease which is more serious and requires treatment. If not treated, very severe ROP can affect a baby's sight and even cause blindness.

## Why does ROP occur?

No one knows exactly why. When a baby is born early the blood vessels of the retina are not fully developed. The main cause of ROP is prematurity itself. The more premature the birth occurs, the greater the risk of ROP occurring. The amount of oxygen required and the baby's general condition may also influence whether ROP develops.

Some premature babies who have no serious illnesses still develop ROP, while others who have been very ill do not.

## When will the screening be done?

The first screening examination will be done when your baby is between 4 and 6 weeks old. Your baby will be examined weekly to fortnightly depending on the results of the examination determined by the ophthalmologist.

## What does the examination involve?

1 hour before the examination, eye drops are put into your baby's eyes. The eye drops make the pupil enlarged so the retina can be seen and relax the muscles in the eye. The Ophthalmologist will use a small speculum to hold the eyelids open so that he can see the retina properly.

## Is the examination painful?

Eye examination can be uncomfortable and babies sometimes cry when their eyes are examined. The Ophthalmologist will make the examination as quick as possible. The examinations will take approximately 2 to 5 minutes. Anaesthetic eye drops are used before the examination to minimise discomfort to your baby. Wrapping your baby securely and the use of oral sucrose drops can help to keep your baby calm during the eye examination.

## What happens if ROP is found?

If the ROP is mild 1 to 2 weekly examinations will be required. More severe ROP will require examination every week. In a few cases the ROP may be severe enough to require treatment. If treatment is required your baby will be referred to a consultant Ophthalmologist who performs laser surgery. The Consultant will talk to you to explain exactly what the treatment involves and to obtain your consent.

After your baby's eye examination you may notice the eyes are slightly red, swollen and sticky for a day or 2 but this soon settles.

## What will be the outcome if my baby does not have the procedure?

If you do not wish your baby to have the ROP procedure we recommend you discuss it further with the Screening Nurse or the medical team. If your baby does not have the procedure we cannot determine / establish if your baby has ROP. Left untreated it may seriously affect your baby's sight and may even cause blindness.

## After your baby's discharge home

The Consultant Ophthalmologist will continue to see your baby until he has determined that the blood vessels are fully developed on the retina. You may have to continue your baby's screening after discharge from hospital. It is very important that you attend any appointments that are made for your baby. ROP appointments will be held at the eye hospital out patients department at New Cross Hospital.

Please do not hesitate to ask your baby's consultant or a member of staff if you require any further information.

## Useful Contact Numbers

Neonatal Screening Co-ordinator

01902 694032

## Reference

RCPCH / RCOPHTH Guidelines for Screening & Treatment of Retinopathy of Prematurity, RCOPHTH, BAPM & BLISS 2008

## Glossary

**Ophthalmologist** - A specialist person that investigates eye problems.

**Speculum** - A medical instrument that holds the eye open.

**Anaesthetic** - An agent that causes loss of sensation.

**Sucrose Drops** - A liquid given to soothe. Pain relief.

## English

If you need information in another way like easy read or a different language please let us know.

If you need an interpreter or assistance please let us know.

## Lithuanian

Jeigu norėtumėte, kad informacija jums būtų pateikta kitu būdu, pavyzdžiui, supaprastinta forma ar kita kalba, prašome mums apie tai pranešti.

Jeigu jums reikia vertėjo ar kitos pagalbos, prašome mums apie tai pranešti.

## Polish

Jeżeli chcieliby Państwo otrzymać te informacje w innej postaci, na przykład w wersji łatwej do czytania lub w innym języku, prosimy powiedzieć nam o tym.

Prosimy poinformować nas również, jeżeli potrzebowaliby Państwo usługi tłumaczenia ustnego lub innej pomocy.

## Punjabi

ਜੇ ਤੁਹਾਨੂੰ ਇਹ ਜਾਣਕਾਰੀ ਕਿਸੇ ਹੋਰ ਰੂਪ ਵਿਚ, ਜਿਵੇਂ ਪੜ੍ਹਨ ਵਿਚ ਆਸਾਨ ਰੂਪ ਜਾਂ ਕਿਸੇ ਦੂਜੀ ਭਾਸ਼ਾ ਵਿਚ, ਚਾਹੀਦੀ ਹੈ ਤਾਂ ਕਿਰਪਾ ਕਰਕੇ ਸਾਨੂੰ ਦੱਸੋ।

ਜੇ ਤੁਹਾਨੂੰ ਦੁਭਾਸ਼ੀਏ ਦੀ ਜਾਂ ਸਹਾਇਤਾ ਦੀ ਲੋੜ ਹੈ ਤਾਂ ਕਿਰਪਾ ਕਰਕੇ ਸਾਨੂੰ ਦੱਸੋ।

## Romanian

Dacă aveți nevoie de informații în alt format, ca de exemplu caractere ușor de citit sau altă limbă, vă rugăm să ne informați.

Dacă aveți nevoie de un interpret sau de asistență, vă rugăm să ne informați.

## Traditional Chinese

如果您需要以其他方式了解信息，如易读或其他语种，请告诉我们。

如果您需要口译人员或帮助，请告诉我们。