

Retinopathy of Prematurity Parent/Guardian Education

Learning about Retinopathy of Prematurity (ROP)

What is the Retina?

The retina is a light-sensitive layer in the back part of the eye. When light hits the retina it sends information to the brain to allow us to see.

What is Retinopathy of Prematurity?

Retinopathy of Prematurity is an eye disease that can affect babies born prematurely. The retinal vessels that help to feed nutrients and supply healthy oxygen to the eye, stop developing as they normally should. This unwanted vessel growth in the retina can cause scarring and potentially cause the retina to pull away, which may cause long term visual problems.

What causes Retinopathy of Prematurity?

Studies have shown that the smaller a baby is at birth and the more premature a baby is at birth, the more likely they may be to have ROP.

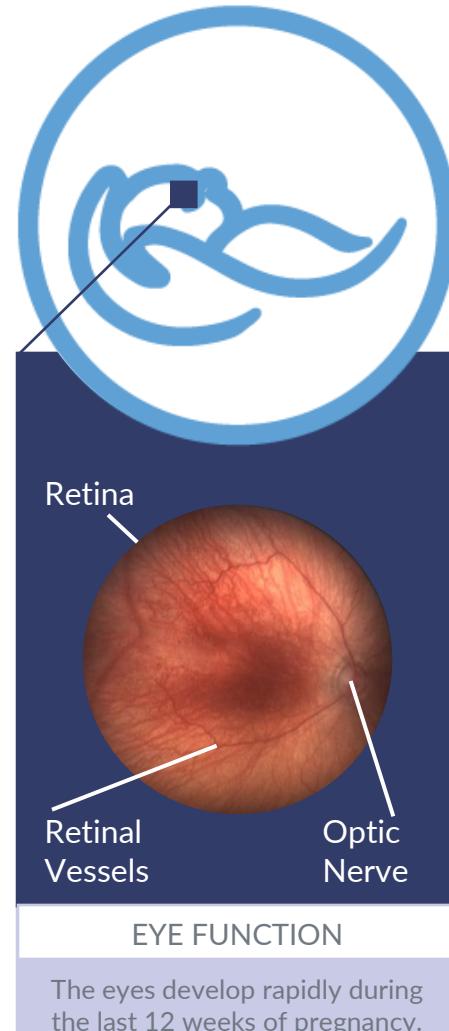
During pregnancy there is a lot of growth happening. When a baby is born prematurely normal vessel growth in the retina may stop. This means the edges of the eye will not get the oxygen and nutrients they need.

The baby's body may respond by making weak unwanted vessels. Weak and fragile blood vessels can be unstable, leaking blood into the light-sensitive layers of the retina causing scarring or potential detachment.

Who should be screened for Retinopathy of Prematurity?

According to the American Academy of Pediatrics guidelines, all babies with a birth weight of less than or equal to 1500 grams or babies with a gestational age of 30 weeks or less

should be screened for this disease. Some babies with a birth weight between 1500 grams and 2000 grams or a gestational age of greater than 30 weeks may also be screened for this disease if the doctor makes that decision.



EYE FUNCTION

The eyes develop rapidly during the last 12 weeks of pregnancy. As a result, premature babies have eyes that are not fully developed.



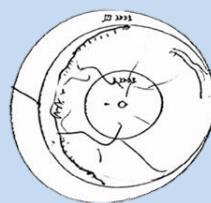
How can my care team look for Retinopathy of Prematurity?

To decide if your baby has ROP a doctor will look inside the eye to see the retinal vessels. For an eye exam, your baby's eyes will be dilated to allow light into the eye. A lid speculum is often used to hold the eyelids open to allow the retina to be viewed without blinks. Two types of exams can be performed to see the retina and look for signs of unwanted retinal vessel growth.



A digital image with the ICON™ Ophthalmic Imaging System may be taken by your care team for remote viewing. With a special camera, your care team will point light to different parts of the retina to image and document findings, either normal or abnormal. These images can be used as a baseline to watch over time, or to determine if immediate treatment is recommended. Once the images have been reviewed, the ophthalmologist will write down their findings to share with you and the care team.

An ophthalmologist may examine your baby's eyes at the bed side. A tool which helps move the eye into different positions so the entire retina can be checked may or may not be used. A special lens that focuses light into the eye will allow the doctor to see the retina. Once the eye exam is complete, the ophthalmologist will write down their findings to share with you and the care team.



How do doctors describe Retinopathy of Prematurity?

Retinopathy of Prematurity is typically described in a Zone (location and extent), a Stage (severity of peripheral disease), and Plus (condition of central vessels). Plus disease may be defined as Plus or Pre-Plus disease and is typically the main indicator for determining treatment.

How is Retinopathy of Prematurity treated?

Early stages of ROP do not require any treatment but must be monitored closely. If ROP advances, laser treatment or injections into the eye can be used to slow or reverse the abnormal blood vessels.

Why are exams after my baby leaves the hospital so important?

When your baby leaves the NICU, he/she may still need thorough eye exams to ensure that the eyes continue to develop completely.

Your understanding of ROP is essential for keeping important follow-up appointments so that any continued treatment needed in order to save your baby's vision can be done in a timely and prompt manner.

The Zones in ROP help doctors to explain the location of the disease. ROP findings within Zone 1 may affect vital visual structures, thus, are often watched more closely.

Notes: