

## Retinopathy of Prematurity

### What is Retinopathy of Prematurity?

Retinopathy of prematurity (ROP) is a potentially blinding eye disease that occurs in some premature babies (those born before 31 weeks). The blood vessels in the retina, which is in the back of the eye, do not completely develop until the ninth month of pregnancy. In many premature babies, retinal blood vessels will continue to develop after birth, causing no problems, but with ROP, abnormal blood vessels develop on the baby's retina which can cause serious eye and vision problems.

### Symptoms

In 85% to 90% of cases, mild ROP resolves on its own with no significant impact on vision. If ROP progresses to a more severe state, an infant may display the following symptoms:

- Have white scar tissue visible in the pupils
- Not respond appropriately to light
- Develop an involuntary, back and forth eye movement as early as three months after the original due date

### Risk Factors

The following factors can contribute to the development of ROP in premature infants:

- How early a baby is born — those before 28 weeks are at higher risk
- Low birth weight — under three pounds or less
- A multiple birth
- Amount of oxygen that must be given to the baby after birth
- Caucasian premature babies are more likely to get ROP than African-American infants.
- Premature infants with additional health problems, especially those involving the lungs and intestines

## **Diagnosis**

All premature infants should be checked for ROP by an ophthalmologist soon after birth. An initial exam can take place in the hospital, and the baby should be checked again four to six weeks after birth.

## **Treatment**

Your ophthalmologist may monitor the ROP for awhile to see if it goes away on its own. However, if abnormal blood vessels continue to grow, treatment is necessary. This can include:

- Laser treatment
- Eye injection of an anti-VEGF (vascular endothelial growth factor) medication

- Cryotherapy (freezing treatment)

All treatments are designed to stop abnormal blood vessel growth and prevent retinal detachment. Your physician will determine the best treatment plan for your baby. If ROP progresses to the point of a retinal detachment, surgery may be performed to reattach the retina.

Babies with ROP should receive regular ophthalmology exams as they grow older to check for any vision problems. ROP can lead to nearsightedness (myopia), retinal detachment, lazy eye, glaucoma or other vision issues.