

Retinopathy of Prematurity

What is Retinopathy of Prematurity?

Retinopathy of Prematurity (ROP) is the abnormal growth of blood vessels in the baby's eye, particularly the retina. The retina is the light sensitive part of the eye. It is most common in babies who are very premature, since the blood vessels of the retina are not completely developed until the baby reaches full term. When a baby is born prematurely, the blood vessels in the retina can grow abnormally and can damage and scar existing blood vessels. If blood vessel growth proceeds normally, the baby does not develop ROP. If the vessels grow and branch abnormally the baby has ROP.

Why do premature babies get ROP?

We do not yet fully understand all the factors leading to ROP. We do know that it is the smallest and sickest babies who are at highest risk for ROP.

How will my doctors know if my baby has ROP?

If your baby is at risk for ROP, your baby's eyes will be checked by an ophthalmologist, a doctor specializing in eye problems. These exams start at about 4-6 weeks of age and occur regularly until the eye vessels have grown to the edges.

What happens if my baby has ROP?

If the ophthalmologist sees any abnormal growth of blood vessels, s/he will record the extent of ROP, called Staging. Infants who have ROP are followed with more frequent eye exams to watch for any progression.

How is ROP treated?

Stage I and early Stage II usually do not need any treatment. These stages may resolve on their own without further progression. Infants with Stage III may require treatment to stop the progression of the abnormal vessels. With treatment (usually laser surgery), the inner lining of the eye at the ends of these vessels is destroyed to prevent further abnormal growth of the blood vessels. This helps prevent the inner lining (retina) from being pulled away from the outer lining (detached) by the abnormal vessels.

Are there long-term effects of ROP?

Premature infants more frequently need glasses in early childhood than children who were not premature. This may be the case even if your child did not have ROP, but it is more common in those with ROP. It is also possible to develop "lazy" eye (amblyopia) or crossed eye (strabismus). Severe ROP can lead to blindness. Treatment of ROP decreases the chances of blindness, but it does not always prevent it.