Retinopathy of prematurity (ROP)

Parent/Caregiver Information

Ophthalmology and Child Health Service

Retinopathy of prematurity (ROP)



What is Retinopathy of prematurity?

Retinopathy of prematurity [ROP] is the abnormal development of blood vessels in the retina of the eye. ROP can occur in premature babies, mainly affecting those born before 31 weeks gestation or with a birth weight under 1301gms. The babies who fit the above criteria are referred to the ophthalmologist [a specialist eye doctor] by the neonatal team. Not all of these babies will be affected but all are routinely checked by an Ophthalmologist whilst still in the neonatal unit.



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The retina lines the inside of the eye. It receives rays of light and sends images to the brain where they are converted into what we see. As the eye develops, tiny blood vessels grow throughout the retina. The blood vessels start developing at 16 weeks of pregnancy and complete growing approximately one month after birth. With retinopathy of prematurity [ROP] these blood vessels may grow in abnormal directions or stop growing too early. The blood vessels are very fragile and there is a high risk of blood leaking from them. This bleeding can result in scarring and the retina being pulled away from the underneath lining, known as a retinal detachment. To help the doctor describe what he/she sees, various terms are used:

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- Stages 1-5 or mild to severe
- Zones [describing where the abnormal blood vessels are situated].

These findings are recorded in your child's notes.



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The visit by the eye Doctor

A time is arranged between the neonatal unit and the visiting ophthalmologist. Approximately 1 hours before the visit your baby will have some prescribed eye drops put in their eyes to enlarge the pupil so that the retina can be clearly seen. These drops last for approximately 4 hours. At the visit the doctor will firstly put some anesthetic drops into your baby's eyes then use a special instrument to keep your baby's eye open during the examination. With a special head lamp and lens she/ he will then look into the eye. Both eyes are examined at each visit. You are welcome to stay for the exam to help comfort your infant and speak with the ophthalmologist; however you may feel some degree of discomfort in watching the procedure.

[continued]

Outcome

The doctor will decide whether your baby can be either discharged from the eye point of view or needs further checks [either weekly or two weekly whilst still in the unit.] then record her/his findings in your baby's notes. Occasionally laser therapy to the blood vessel is needed to minimize further damage to the retina.

Treatment

The treatment usually used is laser therapy. This consists of fine, intense beams of light directed specifically to the area where the abnormal blood vessels are occurring. This procedure is usually done in the neonatal unit by the eye specialist. To help the baby remain really still they are given a general anesthetic. If it is felt that your baby would benefit from this treatment, the eye doctor will discuss it with you. Your consent will always be obtained before this treatment is undertaken. Websites containing further information:

www.ropard.org www.chw.edu.au