



Screening Infants Eyes for Retinopathy of Prematurity (ROP)

Parent/Caregiver/Whānau Information – Neonatal Services

Retinopathy of prematurity is a condition that may affect the eyes of very premature babies. This condition results in the abnormal growth of blood vessels in the retina which is the layer of nerve tissue lining the back of the eyes. The retina does not fully develop until two weeks after term or 42 weeks gestation. As your baby has been born early it is important to screen for any changes in the normal development of the retina in both eyes. If abnormalities are detected, they can be treated early and there is a better chance of good visual outcome. Left untreated retinopathy of prematurity may lead to poor vision or even blindness.

Eye screening is done for all babies born before 30 weeks gestation or weighing less than 1250 g. The initial examination is done at four to six weeks of age and thereafter screening continues every 1–2 weeks until the retina has fully developed. Screening is generally done on a Thursday afternoon on the Christchurch Neonatal Unit.

In preparation for the examination the screening nurse will give your baby sucrose and put special drops into each of your baby's eyes to dilate the pupils. This is necessary, so the eye specialist can adequately examine the retina or back of the eyes. These dilating drops take about 30 minutes to work and their effect may last all day. While the pupils remain dilated your baby may be more sensitive to light and a little unsettled. Occasionally some babies become unwell and may require oxygen and closer monitoring for a few hours.

Approximately one hour after the drops are put in the nurse will assist your baby to have their eyes examined either in their cot space or in a nearby room. Sucrose will be given before the procedure begins to help settle your baby. A small instrument is used to hold the eyelids open. The doctor uses a special type of lens to examine the back of the eye or a camera is used. Parents have a choice to be present or wait outside the room.

After the examination is complete a small drawing is done showing the findings and is placed in your baby's notes. The eye specialist can explain to you how your baby's eyes are developing. He will inform you of future management or the need for further follow up.

Some cases of ROP are mild and improve as your baby gets closer to their due date. But other stages of ROP require surgery to prevent vision loss or blindness. Surgery involves using a laser to stop the growth of the abnormal blood vessels, making sure they don't pull on the retina.

It is important to appreciate that screening for retinopathy of prematurity is not a full eye examination, but merely a screening process for one important condition where prompt treatment may prevent loss of sight. While in the Neonatal Unit you can speak to your neonatal nurse or the neonatal paediatrician if you have any concerns.

Once your baby does not need any further ROP screening checks, you will be referred for an outpatient eye check. Usually these are around 6-12 months of age, earlier if your baby needed treatment. This is because babies who are born prematurely are at higher risk for developing vision issues, which are not caused by Retinopathy of Prematurity, when they grow older.

Some of these issues may include myopia or short sightedness, squint, and lazy eye which may require glasses later in life. It is important you attend any appointments.

SHOULD YOU HAVE ANY CONCERNS BETWEEN DISCHARGE AND THE FOLLOW UP CLINIC IT IS IMPORTANT YOU CONTACT YOUR FAMILY DOCTOR

At the Christchurch Hospital eye outpatient clinic, you will stay with your baby through the entire examination. Babies can be examined while they sit on your lap.



As in NICU, eye drops are still instilled but small instruments are no longer required to keep your babies' eyes open.



Following the examination your eye doctor will tell you what has been observed and if any treatment or follow up is required.

Notes

For more information about:
hospital and specialist services, go to www.cdhb.health.nz | your health and medication, go to www.healthinfo.org.nz