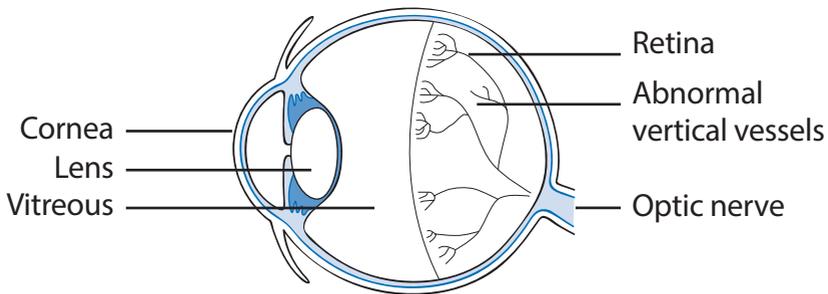


Retinopathy of Prematurity

Retinopathy of Prematurity (ROP) is a disease of the retina, the light sensitive layer covering the inside of the eye. It is abnormal growth of blood vessels in the baby's eye. It is most common in babies who are very premature, born more than 12 weeks early.

The human eye develops rapidly between 28 and 40 weeks of pregnancy. The blood supply to the retina begins to form at about 16 weeks, starting at the optic nerve. Normally, blood vessels grow from the optic nerve towards the edges of the retina, this process continues until the time of birth. When a baby is born prematurely, this process is not complete. The normal growth stops and new abnormal vessels could begin to grow.



If your baby is at risk of developing ROP, your baby's eyes will be checked and examined by an ophthalmologist - a doctor specialising in eye problems.

Screening is currently recommended for all premature babies born less than 32 weeks of pregnancy or weighing less than 1500 grams and are receiving oxygen therapy.

These examinations start at about 4-6 weeks of age and occur regularly until the eye vessels have grown to the edges of the eye.

At the examinations, the baby's pupils are dilated with drops, and surface anaesthetic drops are instilled into your baby's eyes.

A special instrument is then put in your baby's eye to keep it open. The examination is done with an instrument called indirect ophthalmoscope. A bright light is shone in the eyes, this allows the doctor to see the majority of the retina.

After the examination you may notice that your baby's eyelids are swollen and the eyes are red, this will subside in time.

Babies who have ROP are followed up more frequently to watch for any progression of the condition.

ROP is graded and recorded according to its severity

The disease has five different stages; Stage 1 mild, to Stage 5 the most severe.

Depending on the staging and the extent of the ROP a decision will be made regarding treatment. Not all babies with ROP require treatment.

Treatment

In babies who develop ROP, the retinal blood vessel grow abnormally during the first three months of life. When the disease is severe it causes scarring and detachment of the retina; this will cause visual impairment or blindness at about the time the premature infant would have been born if full term. To stop the process, laser treatment is used.

This treatment, destroys the inner lining of the eye at the end of these vessels to prevent further abnormal growth.

This also helps prevent the inner lining (retina) from being pulled away or detached from the outer lining by the abnormal vessels.

In very selected cases treatment can be given using intravitreal injection of anti-vascular endothelial growth factor (VEGF) medication or a combination of laser and injection.

Are there long-term effects of ROP

Premature babies more frequently need glasses in early childhood than children who were not premature.

It is also possible to develop a lazy eye (amblyopia) or wandering eye (squint). Severe ROP can lead to blindness.

Treatment of ROP reduces the chances of blindness, but it does not always prevent it.

If you have any concern's, please ask the consultant at your babies clinic appointment or contact the nursing staff on the Eye Clinic.

Contact details

Doncaster Royal Infirmary Outpatient department, Eye Clinic

Telephone number (01302) 644141

Doncaster Royal Infirmary Neonatal Unit

Telephone number (01302) 642696

Bassetlaw Neonatal Unit

Telephone number (01909) 572228

Patient Advice & Liaison Service (PALS)

The team are available to help with any concerns, complaints or questions you may have about your experience at the Trust. Their office is in the Main Foyer (Gate 4) of Doncaster Royal Infirmary. Contact can be made either in person, by telephone or email.

The contact details are:

Telephone: 01302 642764 or 0800 028 8059

Email: dbth.pals.dbh@nhs.net