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Presentation to:

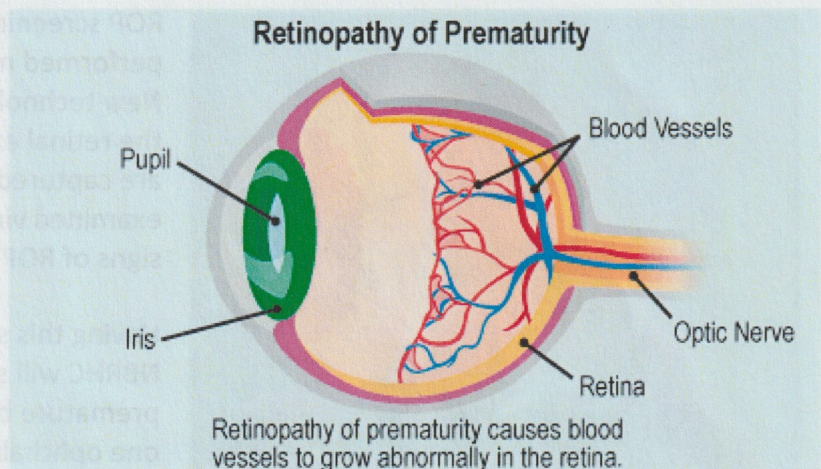
The Rotary Club of North Bay

Re: Retinal Camera for ROP Screening

Imagine, your daughter being born at 28 weeks. Arriving so early, she was sent for care in Toronto. For the last five weeks, she has been through a lot as she continued to grow. You've been staying with family in the city for the duration of her care. You just want to take your baby home.

She's stable and nearly ready to be transferred back to North Bay. You are starting to dream about sleeping in your own bed and having the support of family and friends nearby. But, you have to wait – her eyes need to be examined to ensure the development of her eyesight has not been affected by her prematurity. It's the middle of the summer and the only local ophthalmologist that can provide the exam is on vacation. Without local screening available... your trip home is delayed.

Retinopathy of prematurity (ROP) is a potentially blinding eye disorder that can affect premature infants. The lower a baby's birth weight, the higher the chance of the baby developing ROP. Usually developing in both eyes, ROP is one of the most common causes of childhood vision loss.



Premature babies who may be at risk for ROP are carefully monitored and examined for the condition at three, six and nine weeks after birth, before they can be discharged from the hospital.

ROP has no signs or symptoms when it first develops in a newborn. The only way to diagnose it is through an eye exam by an ophthalmologist.

Abnormal blood vessels grow and spread throughout the retina (the light-sensitive tissue that lines the back of the eye) during development. These blood vessels are very fragile in premature infants and can leak, which can scar the retina and pull it out of position. This often causes retinal detachment - the most common cause of visual impairment and blindness in ROP.

Not all premature babies develop ROP, but the earlier the baby is born, the higher the risk of ROP. About 90 percent of cases of ROP in infants are mild and resolve on their own, but infants with more severe cases can suffer further vision complications and may require surgery to prevent vision loss or blindness. With today's advances in healthcare, ROP is being diagnosed sooner.



Approximately 40% to 50% of neonates born before 31 weeks' gestational age (GA) develop some stage of ROP, 7% to 8% develop severe ROP and 5% to 6% require treatment.

Canadian Neonatal Network

ROP screening has traditionally been performed manually by an ophthalmologist. New technology allows for nurses to perform the retinal exam. Images of the infants retina are captured so that they can then be examined virtually by an ophthalmologist for signs of ROP from anywhere in the province.

Having this specialized equipment available at NBRHC will support the repatriation of premature babies, avoiding delays. With only one ophthalmologist in North Bay being experienced to conduct this exam, it is

common for transfers of babies back home to be delayed because we are not able to support the required eye exam on schedule. With this advanced equipment, that will no longer be an issue.

The retinal camera will ensure that babies can return to NBRHC without delay. The camera costs \$ 150,000.00