Chronic Lung Disease in newborn babies

The Royal Women's Hospital Fact Sheet / www.thewomens.org.au



What is Chronic Lung Disease?

When babies develop a need for oxygen or breathing support over the first few weeks of life, the doctors will say that the baby has "Chronic Lung Disease" (CLD). This condition mostly affects babies who are born prematurely. Another name for CLD is "Bronchopulmonary Dysplasia" or BPD.

The treatments that we use to support your baby's breathing, whilst he or she gets bigger and stronger, can sometimes injure the fragile lung tissue. The injury is due to inflammation and swelling in the lungs which, over time, can lead to scar tissue forming inside the lung. The scar tissue makes it harder for the baby's lungs to work normally. Over time - often weeks or months — the scar tissue will heal and the baby's breathing will usually improve.

Why has my baby developed Chronic Lung Disease?

There are a number of situations that can lead to a baby developing CLD. Your baby's CLD may have been caused by one or more of the following:

- your baby was born prematurely. Though it is also possible for babies to develop problems even when born close to their due date, usually this is because the baby's lungs are not fully developed at birth
- your baby spent a prolonged period of time in the womb after the waters had been broken
- infection, either before or after birth
- your baby has been receiving ventilation and oxygen over a period of time.

Occasionally, babies who are born prematurely but who do not have any of these things happen may also develop CLD.

At the Royal Women's Hospital the chances of babies developing CLD is closely related to the degree of prematurity.

- One in every two babies born at 24 and 25 weeks and surviving to 36 weeks will have CLD.
- One in every three babies born at 26 and 27 weeks gestation and surviving to 36 weeks will have CLD.
- One in every ten babies born at 28 and 29 weeks gestation will develop CLD.
- Babies born at 30 weeks and above are even less likely to develop CLD.

What are the symptoms of Chronic Lung Disease?

The most common symptom is that the baby the baby will have an ongoing need for oxygen or breathing support. Babies may breathe quickly and may suck in their chest more than usual. Babies with more severe CLD may have trouble feeding and gaining weight, as a lot of energy is used just for breathing.

When babies with CLD go home, they may continue to have noisy or wheezy breathing and breathing will require a greater effort than it would for a baby without CLD.

Can Chronic Lung Disease be treated?

There are no specific treatments to make CLD better. The main focus is to help your baby to grow; as your baby grows so will the lungs.

If your baby has CLD and needs help with breathing, we will continue to provide oxygen, CPAP or ventilation as needed. If your baby is on a ventilator, we may use steroids (which work by reducing the inflammation and swelling) to help get your baby off the ventilator. Many babies will also be given medicines to help them produce more urine (diuretics) as this may also help with reducing the swelling in the lungs. If your doctor orders these medications for your baby, they will tell you about the medicines and their side effects, and why your baby needs to take them.

Sadly, despite the treatments we can use, a very small number of babies with severe CLD will not survive.

What will happen to my baby in the long term?

Although a small number of babies will develop very serious CLD, the good news is that most babies will improve over time – weeks or months – and will grow out of their lung disease.

If your baby is ready to go home; feeding and growing well, we may send your baby home with oxygen. We will teach you how to use the equipment and make sure you are comfortable with using it.

Babies with CLD are more likely to be admitted to hospital in the first year of life, largely related to chest infections.

For more information

Your baby's doctor, nurse or care manager are available to answer your questions.

Recommended website

BLISS - the premature baby charity (http://www.bliss.org.uk/)

The Royal Women's Hospital

Newborn Intensive & Special Care Cnr Flemington Rd and Grattan St Parkville VIC 3052

Phone: (03) 8345-3400

Website: www.thewomens.org.au

The Women's is a smoke free hospital. For more information and support visit www.quit.org.au $\,$

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