

PERIVENTRICULAR LEUKOMALACIA

What is periventricular leukomalacia (PVL)?

'Peri' means near and 'Ventricular' refers to the ventricles of the brain. 'Leukomalacia' means softening of the brain. Softening occurs because brain tissue in this area has died.

What causes PVL?

It is thought to be due to too little blood flow to that part of the brain, either during the antenatal period (before birth), just after birth or during a time after birth when a baby is critically ill. Usually we do not know exactly when it occurred, and it may take up to 6 weeks to become evident.

Can it be treated?

There is no treatment for PVL.

What are the complications of PVL?

Because areas of the brain have been lost, areas that the brain would normally control will be lost. This includes motor (movement) problems as well as intellect (mental) development.

What are the things that you will notice?

Abnormalities of motor development will become obvious, these may include:

- difficulty in sucking and swallowing
- tight stiff muscles
- difficulty sitting
- slow to crawl, walk or even an inability to do these things
- frequent arching of the back
- if severe, unable to perform any simple motor activity

Slow mental development:

- may not listen to voice at 3-4 months corrected age
- may not vocalise at 8-9 months
- may not seem to understand or say any words at 12 months
- may not develop speech at all

Other problems that these babies may have include:

- seizures
- poor hearing or deafness
- poor vision or blindness

Can we know how affected the child will be when they are older?

The degree of disability is difficult to predict, but can be guided from the severity of the appearance of the ultrasound. If your baby has PVL the medical officers will discuss the finding with you. All of these babies are followed up in our NICU Growth and Development Clinic. Services in the community are contacted to ensure that your child will receive as much developmental support as possible.

If you have any further questions please ask the medical and nursing staff.

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