



# PERIVENTRICULAR LEUKOMALACIA PVL

## What is PVL?

Periventricular leukomalacia is an area where small cysts have developed in the white matter in the brain, next to one of the ventricles. PVL is not usually seen until the baby is about a month old. The precise cause is usually unclear.

- **Periventricular** means around or near the ventricles which are fluid filled spaces in the brain
- **leuko** means white
- **malacia** means softening

## How common is PVL?

PVL is uncommon.

In babies who are 27 weeks or more at birth, only two per cent, or two in one hundred, will have PVL. Babies born between 23 and 27 weeks have a four per cent risk of developing PVL.

## How is PVL diagnosed?

PVL is diagnosed by brain ultrasound. Babies do not usually have symptoms when their PVL is diagnosed.

## Does PVL lead to problems with brain function?

If cystic PVL is seen on a brain ultrasound about half the infants will have problems with later function, particularly with movement. If the cystic PVL is extensive and involves a large area of the brain, then there is increased risk of intellect being affected as well.

## Can PVL be treated?

There is no treatment for PVL. If PVL is detected, then your baby will have follow-up brain ultrasounds and an MRI at term corrected age. Your baby will be carefully followed up in the neonatal outpatient clinics at the Women's or by your local hospital services after discharge home.

## Will my baby have brain problems later in life?

The doctors will be able to tell you the overall chance of your baby having a problem later in life. However, they will not be able to tell you whether your baby will definitely have a problem or not and they will not be able to forecast the exact nature of the problem.

## For more information

**Medline Plus** - <http://medlineplus.gov/>

- Entry in Medical Encyclopedia - <http://www.nlm.nih.gov/medlineplus/ency/article/007232.htm>
- Enter condition into Medline Plus search function for a list of relevant links

### **Newborn Intensive Care Unit**

Royal Women's Hospital  
Cnr Flemington Rd and Grattan St  
Parkville VIC 3052  
T: (03) 8345 3400

### **Special Care Nursery**

The Women's at Sandringham  
193 Bluff Rd  
Sandringham VIC 3191  
T: (03) 9076 1572

### Reference

Volpe JJ. Neurology of the Newborn 6th edn. 2017