

An ultrasound finding of a choroid plexus cysts (CPC) is common in about 1-2% of normal pregnancies. The choroid plexus is a spongy tissue that lines the fluid-filled spaces (ventricles) of the brain. Cysts found within the choroid plexus are called choroid plexus cysts (CPCs). They are not in the “thinking” part of the brain and do not affect brain function in any way. They are frequently seen in ultrasounds performed at 16-24 weeks of pregnancy.

An *isolated* CPC means there were no other fetal abnormalities detected. About 90% of the time, CPCs that are related to an underlying chromosome abnormality will be associated with other findings on ultrasound. This is because babies with chromosome abnormalities usually have multiple organs that are affected, such as heart, stomach, and limbs. It is important to note that ultrasound is not perfect at identifying all fetal abnormalities.

CPCs can occasionally be associated with a chromosome abnormality in the baby. Normally within our cells there are 46 chromosomes; these carry our genes, which are the instructions for normal growth and development. Babies with greater or fewer than 46 chromosomes have a chromosome abnormality. In most cases, these babies can have serious physical and/or mental disabilities.

Trisomy 18 is the abnormality most commonly associated with CPCs. This condition results in severe mental and physical handicaps. Babies with trisomy 18 are often lost during the pregnancy as a miscarriage or stillbirth or die within the first year of life. A few cases of other types of chromosome problems have been reported in association with CPCs.

If a CPC is identified without any other ultrasound abnormalities, usually nothing further needs to be done as most CPC disappear spontaneously between 20-28 weeks. If a CPC is identified in the following cases, further diagnostic testing, such as an amniocentesis, can be offered:

- Maternal age greater than or equal to 35
- Positive first trimester screen
- High risk non-invasive prenatal test (e.g. Harmony test)
- Past pregnancy or child affected by a chromosomal abnormality

An amniocentesis is performed after 15 weeks by taking a needle sample of the fluid surrounding the baby. This test will look at the chromosomes of baby to identify if an abnormality is actually present. There is a 1 in 200 chance of miscarriage as a result of this test.

The choice about further testing is yours. We encourage you to obtain as much information as you find necessary when making your decision.

Important take-home messages:

With improvements in ultrasound technology, CPC are now seen more frequently in ultrasounds performed at 16-24 weeks. CPC are not harmful to the baby, and almost always disappear before 28 weeks of pregnancy. The vast majority of babies with CPC identified in pregnancy are born without problems. Up-to-date information on your risks can be obtained through counselling, arranged through our clinic.