PATIENT EDUCATION

# FAQ: Choroid Plexus Cysts

The presence of isolated choroid plexus cysts (CPCs) on a second trimester ultrasound is a common cause of anxiety, although it is almost always an innocent finding. Here are the answers to some commonly asked questions about CPCs.



### What are choroid plexus cysts?

The choroid plexus is the part of the brain that makes cerebrospinal fluid, the fluid that normally bathes and protects the brain and spinal column. In about 1 to 2 percent of normal babies – 1 out of 50 to 100 – a tiny bubble of fluid is pinched off as the choroid plexus forms. This appears as a cyst inside the choroid plexus at the time of ultrasound. A choroid plexus cyst can be likened to a blister and is not considered a brain abnormality.

### What is going to happen to the cyst?

In the vast majority of cases, the cyst resolves or disappears and has no consequences.

### What is the concern?

As mentioned, choroid plexus cysts are present in 1 to 2 percent of normal fetuses. However, in a very small percentage of fetuses with choroid plexus cysts, there is an associated chromosome disorder called trisomy 18. Fetuses with trisomy 18 have an extra copy of chromosome 18. Frequently, fetuses with trisomy 18 are stillborn. Survivors beyond infancy are rare. They have severe mental retardation and a variety of other problems including abnormalities of almost any organ system such as the heart, brain and kidneys. Fetuses with trisomy 18 have choroid plexus cysts about a third of the time. Therefore, when we see choroid plexus cysts, we are concerned that the fetus may have trisomy 18.

Trisomy 18 is rare. It is present in less than 1 in 3,000 newborns. Choroid plexus cysts are relatively common in normal fetuses. Most fetuses with a choroid plexus cyst are normal. Furthermore, many of the abnormalities associated with trisomy 18 can be detected by a careful ultrasound. In fact, fetuses with trisomy 18 almost always demonstrate abnormalities on ultrasound in addition to choroid plexus cysts, although some of these abnormalities can be quite subtle. If no additional abnormalities are detected by a thorough "level II" ultrasound, the likelihood the fetus has trisomy 18 is very low.

### What are the odds that it is a sign of trisomy 18?

The precise rate of risk is difficult to estimate and is somewhat controversial, but most doctors believe it is well under 1 percent. In other words, a fetus with choroid plexus cysts but an otherwise normal ultrasound has a better than 99 percent chance of not having trisomy 18. A normal alpha fetoprotein (AFP) test further reduces the likelihood of trisomy 18.

### Does the size of the cyst matter?

Ordinarily, the size does not matter, although multiple, large cysts are slightly more worrisome.

### What is the next step after a cyst is discovered?

We can perform an amniocentesis, and count the number of chromosomes in the fetus to be certain there is not an extra copy of chromosome 18. At the same time, we can rule out other chromosomal abnormalities, such as Down syndrome, although we have no reason to suspect any of these in your case. However there is a small risk of amniocentesis causing a miscarriage.

### How high is the miscarriage risk with amniocentesis?

The rate of risk for miscarriage with amniocentesis is difficult to determine. Many doctors cite 0.5 percent or 1 in 200.

### Can I just wait to see if the cyst resolves?

That won't help your decision, because cysts almost always resolve in both normal fetuses, as well at those with trisomy 18. The natural course for a CPC is to resolve or disappear. However, even when the cyst resolves, it does not reduce the chance that the fetus has trisomy 18.

### What should I do?

If you do nothing further, you should be confident that your baby most likely has normal chromosomes. If you have not yet had an alpha fetoprotein (AFP) test, this can be done to further evaluate the chance of trisomy 18. A level II ultrasound, or a targeted scan, should be done, if it has not been done already to look for other signs of trisomy 18.

If you need to be certain, we can do the amniocentesis, with the knowledge that it is very unlikely to result in a complication. Your decision should depend on what you would do with the information from an amniocentesis, how you would feel about a miscarriage, how you would feel about an affected child and the anxiety you might feel until the child is born. If you want to proceed with the amniocentesis, you can be reassured that the complications from the procedure are quite rare.

*UCSF Health medical specialists have reviewed this information. It is for educational purposes only and is not intended to replace the advice of your doctor or other health care provider. We encourage you to discuss any questions or concerns you may have with your provider.*

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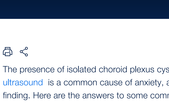

**FAQ: Amniocentesis**
Amniocentesis is a prenatal diagnostic test that can detect significant chromosome problems. Find frequently asked questions regarding Amniocentesis here.

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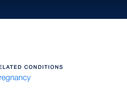

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