

Pericardial effusion

Patient Information Series – What you should know, what you should ask.

What is Pericardial Effusion?

Pericardial Effusion refers to the accumulation of fluid in the pericardial sac, the thin membrane surrounding the heart, detected during pregnancy through fetal ultrasound. Most definitions of pericardial effusion require a thickness of 4 or more millimeters of fluid on ultrasound. This condition can vary in severity, ranging from a small, clinically insignificant amount of fluid to a large effusion that can affect the heart's function. In some cases, it can be part of the progression of fetal hydrops or ascites, a serious condition characterized by widespread fluid accumulation in the fetal body, for example in fetal anemia.

What causes Pericardial Effusion?

The causes of pericardial effusion in fetuses can be varied. It can be associated with chromosomal abnormalities or other genetic conditions, such as Trisomy 21 or 18, Turner syndrome, or Noonan syndrome; fetal heart defects or other congenital anomalies, maternal viral infections such as Parvovirus B19, Cocksackievirus, Cytomegalovirus (CMV), and Rubella; fetal anemia, or autoimmune disorders, such as maternal SLE (lupus). In some cases, the cause remains unknown.

Should I have more tests done?

Your caregiver can advise you regarding further testing. Detailed ultrasound and fetal echocardiography, a specialized ultrasound of the heart that provides detailed images of its structure and function, are key in diagnosing and assessing the pericardial effusion as well as identifying other structural anomalies in the fetus and evaluating fetal well-being. Genetic counseling and testing, including karyotyping or more advanced genetic testing, can help determine if there is a genetic component to your baby's condition. Testing for maternal infections that can affect the fetus can determine if infection is the cause of the condition. You might consult with a maternal-fetal medicine specialist (who specializes in high-risk pregnancies), to advise you on your individual baby's condition, development, and prognosis.

What are the things to watch for during my pregnancy?

Your healthcare team can counsel you on how to watch for any signs of complications during pregnancy, such as reduced fetal movements or changes in your health, as well as advise you regarding regular antenatal check-ups and fetal monitoring. The management of pericardial effusion during your pregnancy will depend on its underlying cause and severity, as well as any changes during the course of your pregnancy. In mild cases only monitoring and no intervention may be needed, while more severe cases might necessitate in-utero procedures or early delivery and postnatal treatment.

Pericardial effusion

Patient Information Series – What you should know, what you should ask.

What will it mean for my baby after it is born?

Each baby with pericardial effusion is unique. Your baby's prognosis after delivery depends on the severity of the condition, its underlying cause, and the presence of other anomalies or conditions. Mild cases may resolve on their own, while severe cases may require ongoing care to treat the underlying condition that caused the pericardial effusion. The presence of a significant pericardial effusion may influence decisions about the timing and mode of delivery, as well as the need for specialized care immediately after birth. Your care team can advise you about your baby's prognosis.

Will it happen again?

The risk of pericardial effusion occurring again depends on the underlying cause of the condition in the present pregnancy. Your caregiver can address your individual medical history, such as autoimmune disorders or blood-type incompatibility, and in cases with a genetic component, a genetic counselor can assess the risk of recurrence based on your family history and any genetic testing results.

What other questions should I ask?

- What is the severity of the pericardial effusion in my baby?
- What additional tests or evaluations need to be performed during the pregnancy to assess my baby's condition?
- Can you explain the expected course of treatment that will be needed during my pregnancy?
- Where should we plan to deliver the baby?
- What are the long-term implications of this type of pericardial effusion for my baby after birth?

Last updated 1-2024