

Enlargement of the Vein of Galen

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

What is Enlargement of the Vein of Galen?

Enlargement of the Vein of Galen is a rare abnormality of the blood vessels in the brain of the fetus, occurring in 1 in 25,000 births. There is enlargement of a midline blood vessel with active blood flow. It develops in the first trimester of pregnancy but is usually detected in the third trimester. It usually occurs in isolation, but it may occur in association with heart defects or fluid collection around the baby's neck.

How does it happen?

It is not entirely clear how this happens, but it may result from failure of some vascular connections in the brain to regress, thus leading to the appearance of abnormal linkages between blood vessels, and formation of the vein of Galen.

How are chromosomes enlargement of Vein of Galen?

Enlargement of the Vein of Galen is usually not associated with an increase in risk for chromosomal abnormalities or genetic syndromes.

Should I have more tests done?

There could be some complications occurring because of an enlarged Vein of Galen. A detailed ultrasound scan will have to be done to determine if there are other abnormalities in the baby's brain. A fetal echocardiogram will also be required to identify early signs of fetal heart failure.

What are the things to watch for during pregnancy?

Because of the extra blood flow in the baby's brain, certain complications can occur and your baby will have to be closely monitored with ultrasound due to the increased risk of developing enlargement of fluid-filled spaces in the brain (hydrocephalus) and heart failure in the fetus. Your doctor will suggest special ultrasound exams using a technology called colour Doppler to view the unusual blood flow in the brain. Often MRI is also indicated to assess not only the unusual blood flow but also the surrounding brain structures. Detailed ultrasound of the baby's heart is also indicated to rule out signs of heart failure due to an increased load on the heart caused by the amount of blood flow through the abnormal blood vessel.

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

Your baby will have to be delivered in a center with advanced facilities to provide intensive care and surgery for babies. An enlargement of the Vein of Galen is associated with a high risk of death of the fetus, and this is most significant if heart failure is already evident before the baby is born. In surviving babies, a procedure to block off blood flow through this abnormal vessel (embolization) can be performed. Recently, a similar fetal intervention has been developed to block the enlarged vessel in select, severe cases. .

Will it happen again?

Enlargement of the Vein of Galen is not likely to recur in your subsequent pregnancies.

Enlargement of the Vein of Galen

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

What other questions should I ask?

- Will my baby have a normal brain development?
- How should my baby be delivered?
- Are there signs of heart failure in my baby?
- Would my baby benefit from surgical treatment before birth?
- Can my baby have a good outcome without a surgical intervention?
- What are the chances of survival of my baby after surgery?

Last updated February 2024