

Persistent Left Superior Vena Cava (PLSVC)

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

What is a PLSVC?

Isolated persistent left superior vena cava (PLSVC) is a common normal variant of systemic venous connections where there is a persistence of left-sided SVC. Normally we have only right -sided SVC and the left -sided SVC regresses in the embryonic period.

How does a PLSVC happen?

PLSVC occurs in about 1 in 300 babies. It is not clear how it happens. Almost half of the babies with a PLSVC have associated problems, most often with their heart. 7-9 out of 100 have changes in the chromosomes.

Should I have more tests done?

Many women will choose to have more tests done to know more about the condition of the baby. Tests to ask about include an amniocentesis to look for problems with the chromosomes. You should also ask if a fetal echocardiography, a specialised ultrasound of the heart of the baby during the pregnancy, can be done. You should also request a detailed fetal scan from a fetal medicine specialist.

What are the things to watch for during the pregnancy?

Babies with PLSVC are at risk of some associated cardiac malformations (i.e., coarctation of aorta) which can evolve as pregnancy advances. That is why most specialists will recommend regular ultrasound examinations. The ultrasound will help identify if the baby's heart develops some changes such as coarctation of the aorta (this is a narrowing within the main arterial vessel departing from the heart).

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

Most babies with an isolated PLSVC do not have any problems and don't require any intervention. The baby should have an ultrasound examination of the heart after birth to make sure the heart otherwise appears normal. Babies who have associated problems with the chromosomes or abnormalities within the heart, can have additional problems after being born.

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Will it happen again?

When no other genetic reason is found to explain the PLSVC, the risk of this happening again is extremely small. If there is a genetic reason, then the risk depends on the reason and a consultation with a geneticist may be helpful to understand this.

What other questions should I ask?

- Does my baby's heart look normal?
- How often will I have ultrasound examinations done?
- Is coarctation of the aorta during the pregnancy predictable?
- Where should I deliver?
- Where will the baby receive the best care after it is born?
- Can I meet in advance with the team of doctors that will be looking after my baby when it is born?

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