

# Fetal Heart Bradycardia

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

## What is Fetal Heart Bradycardia (FHB)?

Fetal bradycardia means an abnormally slow fetal heart rate and rhythm, lower than normal range of 120-160 beats per minute.

## How does FHB happen?

It is not clear why it happens in fetal life. It may be a temporary or persistent problem. To clarify this, a complete fetal echocardiography exam (a detailed ultrasound examination of the fetal heart) will be performed and analysed. Sometimes, additional blood tests may be advised.

## How are chromosomes relevant to a FHB?

Chromosomes are usually not important when the fetus has normal heart anatomy. In cases of abnormal fetal heart anatomy, chromosomal analysis may be recommended.

## Should I have more tests done?

After analysing fetal echocardiography and type of fetal bradycardia your doctor may recommended additional blood tests

## What are the things to watch for during the pregnancy?

Babies with FHB are at risk of some problems during the pregnancy. That is why most specialists will recommend regular ultrasound examination + fetal echocardiography at least every 1 to 3 weeks. The fetal echocardiogram will help identify if the baby is going into heart failure due to abnormal heart rhythm.

Sometimes, mothers may also accumulate extra amniotic fluid around the baby. This condition is called **polyhydramnios**. It can stretch the uterus too much and cause early labour well before the due date. Knowing this in advance, your doctor or midwife can help with decreasing the risk of an early birth. Therefore frequent assessments are suggested to detect early abnormal findings and optimise the condition of the fetus. It is important to deliver in a center that can care for the newborn immediately after birth.

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

Fetal bradycardia may be a temporary condition during fetal life and resolve spontaneously in the newborn period. In case of persistent fetal bradycardia a prolonged hospital stay in Neonatal Department or in Intensive Care Unit may be necessary. The baby will have heart monitoring 24 hours, ECG, neonatal echocardiography and cardiac evaluation by a pediatric heart specialist. The baby may require pharmacological treatment (drug) but in some cases may also require implantation of pacemaker to keep the heart rate in the normal range.

Baby who also have a structural heart problem associated with slow heart rate maybe in severe clinical condition, requiring other interventions and care by a multidisciplinary team, including a pediatric cardiologist, pediatric cardiac surgeon and anesthetist. In some cases the medical intensive care could be withdrawn, but this will be discussed with parents.

## Will it happen again?

If no other genetic reason is found to explain the presence of heart defect and slow fetal heart rhythm, the risk of this happening again is less than 1 in a 1000. If there is a genetic reason, this will determine the recurrence risk, and a consultation with a genetic specialist may be helpful to help sorting this out. Generally, in families where the fetal bradycardia was caused by maternal antibodies, the risk of it happening again in future pregnancies is approximately

## What other questions should I ask?

- Where should I deliver?
- Where will the baby receive the best care after it is born?
- Can I meet the team of doctors that will be assisting my baby when it is born in advance?

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