



# Prenatal ultrasound showing fetal tachycardia

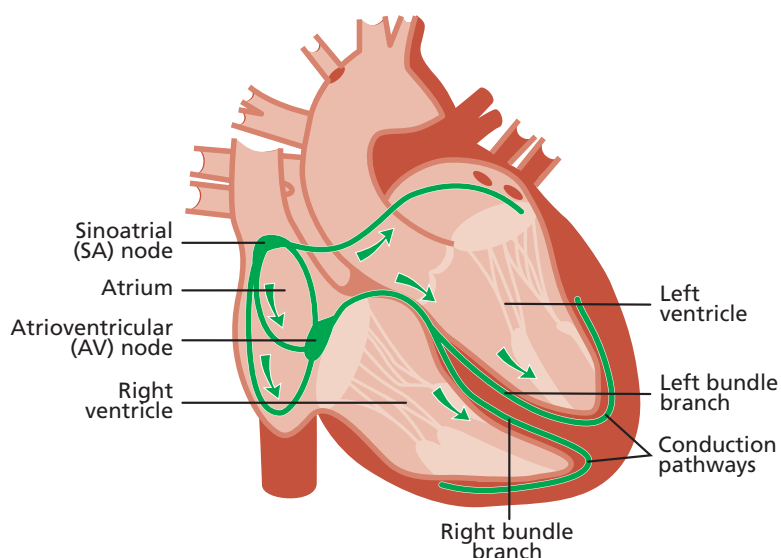
This information sheet from Great Ormond Street Hospital (GOSH) explains about fetal tachycardia detected during a prenatal ultrasound scan and what this might mean for your child. It will support the information discussed with you by your doctor and nurse at your appointment and it is important to remember that every case is slightly different.

## What is tachycardia?

Tachycardia is an abnormally fast heart rate. The normal fetal heart rate is between 120 and 160 beats per minute. Typically, an abnormally fast heart rate is over 200 beats per minute.

The heart is made up of four chambers – two at the top called atria and two at the bottom called ventricles. The ventricles are the pumping chambers of the heart. It is the top two chambers of the heart (atria) that set the pace of the heart, and normally the ventricles only respond to electrical impulses from the atria.

In some fetuses, the atria and ventricles are both beating fast but at the same rate (supraventricular tachycardia). In others, the atria beat exceedingly fast (over 300 beats per minute), much faster than the ventricles (atrial flutter). Other rhythm disturbances may occur but are much rarer.



## How does the fast heart rate affect my baby?

In some situations, as a result of the fast heart rate, fluid may gather inside the baby (hydrops). This can make the fast heart rate more difficult to control.

## What treatments are available?

In most cases we can reduce the fast heart rate by giving medication to the mother, which passes through the placenta to the baby.

We perform a simple test on the mother's heart called an electrocardiogram (ECG) before prescribing the medication. Some stickers will be applied to the chest to check your heart rhythm and that it is safe to give you the medication. Some medications can take two to three weeks before they are effective in reducing a baby's heart rate.

Usually treatment is given as an outpatient and does not need a stay in hospital. However, we will monitor you and your baby's heart rate regularly when you first start taking it.

The aim of treatment is to control the rhythm of the baby's heart, which in most cases allows a normal birth at term (after 37 weeks). We may need to take blood samples from you to check the levels of the medication in your body to make sure that they are within the correct range.

Occasionally, we may have to try more than one medication before we are able to reduce the baby's tachycardia. The type of treatment selected depends on a number of factors including the type of the tachycardia, how many weeks pregnant you are, and if there are signs of hydrops.

We may need to reassess treatment if medication is not effective in reducing your baby's heart rate. Each case may differ slightly and the consultants will talk to you about management of your baby's fast heart rate during your appointments at GOSH.

There are rare occasions where, despite medication, it may not be possible to reduce the fast heart rate and it may remain high for the rest of the pregnancy.

## Can I be monitored at my local hospital?

Once we have controlled your baby's heart rate, your care will be managed jointly between your local hospital and GOSH. You should continue taking the prescribed medication until your baby is born.

## Will I have a normal delivery?

In the majority of cases, a normal delivery at your local hospital is possible. During labour, a baby's heart rate is monitored for signs of stress. If your baby's heart rate is already high, this can make it difficult for the labour team to monitor your baby's wellbeing.

Your obstetric team and the fetal team at GOSH will discuss the safest mode of delivery for you and your baby, and this may include the possibility of early delivery (before 37 weeks) or a Caesarean section may be advised.

## What happens after the baby is born?

After birth, babies usually do very well even though you took medication during pregnancy.

After your baby is born, we recommend that they have an electrocardiogram (ECG) to check their heart rhythm. The doctors looking after your baby will then talk to you about whether any further treatment or monitoring is needed. The causes of your baby's tachycardia will be investigated and may require further treatment.

Your baby's fast heart rate is likely to continue after birth, but in some cases the tachycardia can slow down to a normal rate by itself. In either situation, a period of monitoring will be required and in most cases medications are still used to control the fast heart rate.

Your baby will be referred to a paediatric cardiologist who will review your baby, ECG and ECHO results and will help to manage the medications your baby needs. Occasionally more than one medication is required.

## Further information and support

Before birth, please call the Fetal Cardiac Nurse Specialists on 020 7762 6711 or send them an email to [gos-tr.fetalcns@nhs.net](mailto:gos-tr.fetalcns@nhs.net)

After birth, you can call the Electrophysiology team on 020 7405 9200 extension 5298 or send an email to [gos.tr.ecg.gosh@nhs.net](mailto:gos.tr.ecg.gosh@nhs.net)

**Heartline Families** is a support group for anyone affected by a child's heart problem. Call them on 0330 022 44 66 or visit their website at [www.heartline.org.uk](http://www.heartline.org.uk).

**Antenatal Results and Choices (ARC)** is a registered charity that offers continued support and advice to parents who face difficult decisions regarding fetal abnormalities. Call them on 020 7631 0285 or visit their website at [www.arc-org.uk](http://www.arc-org.uk)

**Children's Heart Federation (CHF)** is a national charity and the umbrella body for voluntary organisations working to meet the needs of children and young people with congenital and acquired heart conditions and their families. Call their free helpline on 0808 808 5000 (Monday to Friday from 9.30am to 4.30pm) or visit their website at [www.childrens-heart-fed.org.uk](http://www.childrens-heart-fed.org.uk)

**British Heart Foundation (BHF)** is a national charity providing information and support to anyone of any age affected by heart problems. Call their helpline on 0300 330 3311 or visit their website at [www.bhf.org.uk](http://www.bhf.org.uk)

**Heart Rhythm Alliance** – a national charity for the support of patients with heart rhythm problems. Call them on 01789 867501 or visit their website at [www.heartrhythmalliance.org](http://www.heartrhythmalliance.org)