

Right aortic arch

Information for children, families and carers

We have given you this factsheet because a scan has shown that your baby has a condition called a right aortic arch. This factsheet has been designed to go alongside discussions we will have with you about your care and the care of your baby, both during pregnancy and after your baby's birth. We hope it will help to answer some of the questions you may have. If you have any further questions or concerns, please speak to a member of our team.

What is the aorta?

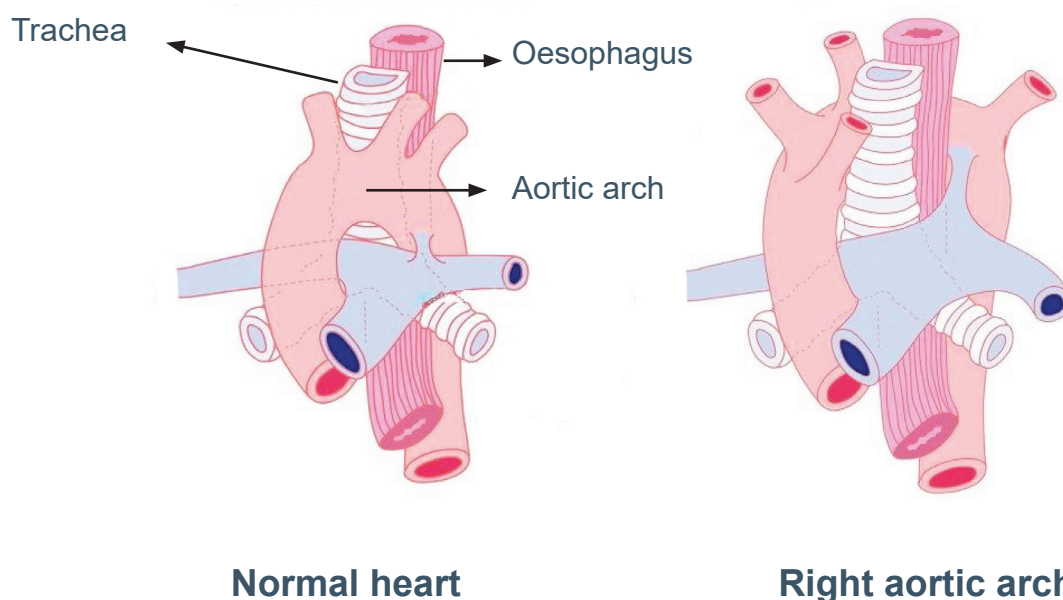
The aorta is the main artery that carries blood containing oxygen away from your heart and delivers it to the rest of your body. The aorta forms an arch inside the chest, usually on the left side of your body. The aortic arch is responsible for supplying blood to your arms and neck.

What is a right aortic arch?

In some people, the arch of the aorta turns to the right instead of to the left and develops in the right side of the chest. This is known as a right aortic arch.

A right aortic arch is a common condition that affects approximately 1% of the general population. It occurs during early pregnancy when a baby is still developing in the womb (uterus).

A right aortic arch does not usually cause any problems. However, the altered position of the aortic arch can occasionally cause problems if a vascular ring forms. A vascular ring occurs when the vessel which supplies blood to the left arm takes a different route through the body and accidentally forms a partial or complete ring around the windpipe (trachea) and/or food pipe (oesophagus). If too tight, a vascular ring can squash these structures and cause breathing and digestive problems.



What causes a right aortic arch?

The cause of a right aortic arch is unknown.

What does this mean for my baby during pregnancy?

A right aortic arch can be an isolated condition (which means no other condition occurs with it), but it is also more common in babies with certain chromosomal abnormalities. Between 3 to 5% of babies who are born with a right aortic arch will have a condition called DiGeorge syndrome (a chromosomal condition present from birth that can cause a range of lifelong problems, including heart defects and learning difficulties).

You will be offered a diagnostic test known as an amniocentesis to determine whether or not your baby has a chromosomal condition such as DiGeorge syndrome. An amniocentesis involves removing and testing a small sample of fluid from the amniotic sac that surrounds your unborn baby in the womb to check for any chromosomal abnormalities. It is important that you take time to consider your options and ask any questions you may have before you decide whether or not having a diagnostic test is the right choice for you.

What are the symptoms?

Symptoms of a right aortic arch may not be obvious immediately after your baby's birth and may develop slowly over months or years.

Please contact us straightaway if your baby experiences any of the following symptoms:

- noisy breathing
- frequent chest infections
- difficulty feeding and swallowing
- poor weight gain

A vascular ring may have formed and may be putting pressure on your baby's windpipe and/or food pipe.

How is it treated?

If your baby experiences any of the symptoms above, we will arrange for your baby to have a computerised tomography (CT) scan (a scan that uses x-rays and a computer to create detailed images of the inside of the body). This scan will show us if a vascular ring has formed and how tight the ring is.

If the CT scan shows that a vascular ring has formed, we may recommend that your baby has a bronchoscopy (a procedure that allows a doctor to see the inside of your baby's airways).

The type of treatment your baby will need will depend on the results of their CT scan and/or bronchoscopy. Some babies may need to have an operation to release the vascular ring or move the vessels so that their windpipe and food pipe are no longer squashed. If we think your baby needs to have an operation, we will discuss the procedure with you in more detail.

Will my baby need any long-term care?

Your baby will have outpatient appointments with a cardiologist (a doctor who specialises in the heart). These appointments will monitor your baby for any symptoms. The first appointment will be when your baby is around three months old. The appointments will then be yearly. If your baby does not have any symptoms, we will discharge them from cardiology care when they are around two years old.

Contact us

If you have any questions or concerns, please contact us.

Children's cardiac nurse specialists

Telephone: **023 8120 4659**

Image adapted from Leeds Teaching Hospitals NHS Trust "Babies with right aortic arch" patient information leaflet.

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Version 1. Published March 2022. Due for review March 2025. 3096.