

COARCTATION OF THE AORTA

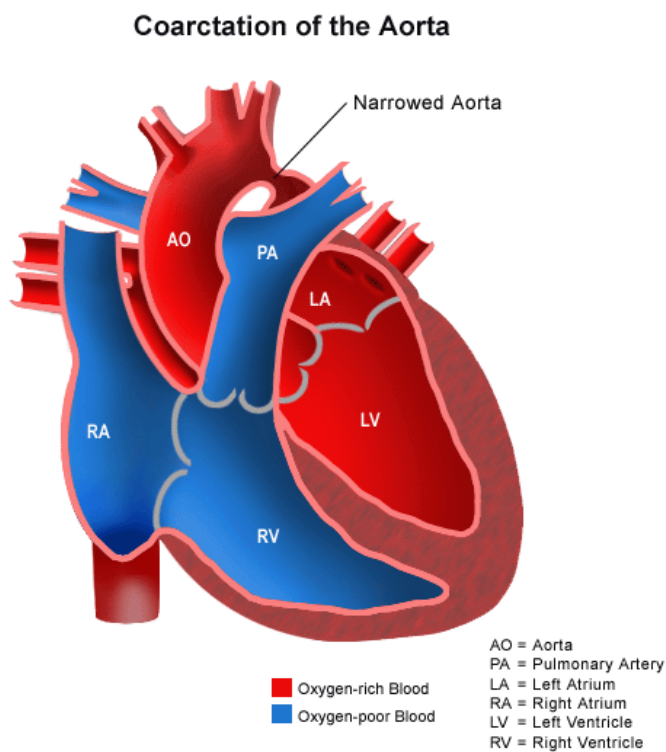
What is the aorta?

The aorta is the main blood vessel that carries blood from the left side of the heart to the rest of the body.

What does coarctation mean?

Coarctation simply means a narrowing.

Coarctation of the aorta is a narrowing of the main blood vessel carrying blood to the body.



<http://www.rush.edu/rumc/page-1098987358085.html>

Where is the narrowing?

The narrow area is usually a short segment of the aorta just beyond where the arteries to the head and neck leave the aorta. It is also in the area where the ductus arteriosus attaches. The ductus arteriosus is a vessel that runs between the aorta and the pulmonary (lung) arteries. It is present in the fetus and normally closes after birth.

Can there be other abnormalities with my baby's heart?

The valve that controls blood flow from the left side of the heart (ventricle) to the aorta may be abnormal, having only two leaflets instead of three. A hole in the membrane separating the right and left ventricle may coexist (ventricular septal defect). There may be other more complex abnormalities of the heart. The medical staff will discuss these with you.

fact sheet

What problems does a coarctation cause?

Because of the narrowing in the aorta, the left side of the heart has to work much harder to push the blood through the narrow vessel. This may result in the heart failing. The narrowing may also mean that not enough blood is supplied to the rest of the body.

How is coarctation of the aorta diagnosed?

Medical or nursing staff may suspect your baby has a coarctation of the aorta because they may not be able to feel your baby's femoral pulses (main pulses of the leg). Your baby may also have a murmur (noise that is heard when listening to the heart with a stethoscope). The baby will often appear well in the first few hours to days of life as the ductus arteriosus remains open. When the ductus closes the rest of the body can no longer get enough blood supply and the baby may become shocked and unwell. An echocardiogram (ultrasound of the heart) will be performed which will confirm the diagnosis.

How is coarctation of the aorta treated?

Initially to help provide blood flow to the rest of the body, your baby will be commenced on a drug called prostin to keep the ductus arteriosus open. The ductus arteriosus usually opens into the aorta beyond the narrowed segment, so blood can bypass the narrowing if it is kept open. One of the side effects of this medication is that it can make babies stop breathing. Babies will often be intubated (a tube placed into the airway) and placed on a ventilator to help them breathe while they are on this medication.

Babies from Canberra will be transferred to Sydney for surgery to be performed on the aorta. Most commonly the narrowed area is removed and the ends joined together. The cardiac (heart) surgeons in Sydney will discuss the surgery in more detail with you.

Are there any long-term problems following surgery?

Occasionally the area of the aorta may narrow again and need to be dilated (stretched). There is also a risk that children who have had a coarctation of the aorta may develop high blood pressure (hypertension). Infants who have had a coarctation repair require long-term follow-up with a cardiologist and should have their blood pressure checked every year for the rest of their life.

If you have any further questions please ask the medical and nursing staff.