



Mercy Health
Care first

Your important health information

Patent ductus arteriosus (PDA)

This information is for parents of premature babies who have been diagnosed with a heart condition called patent ductus arteriosus (PDA).

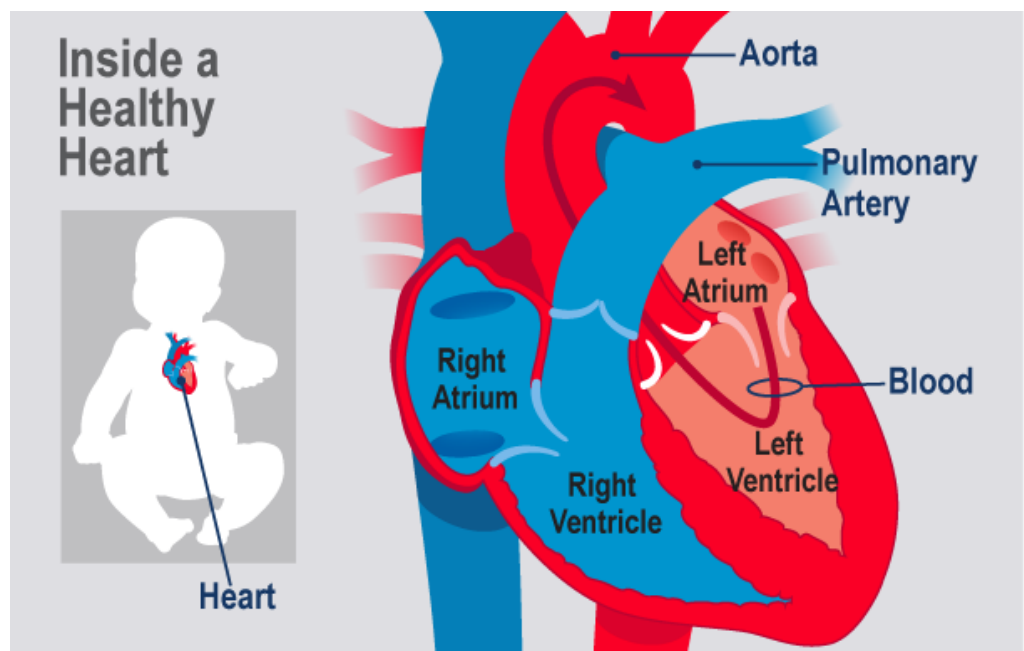
What is a ductus arteriosus?

The ductus arteriosus is a small muscular blood vessel (duct) that joins the pulmonary artery (main artery to the lungs) to the aorta (main artery to the body). This allows blood to be diverted away from the lungs whilst a baby develops in the womb, as the lungs are not used before birth. The lungs are only used to breathe when the baby is born.

After birth, a baby must use their lungs to take in oxygen and remove carbon dioxide, so the blood needs to go through the pulmonary artery to the lungs to pick up oxygen instead of going through the ductus arteriosus. This means that the ductus arteriosus must close.

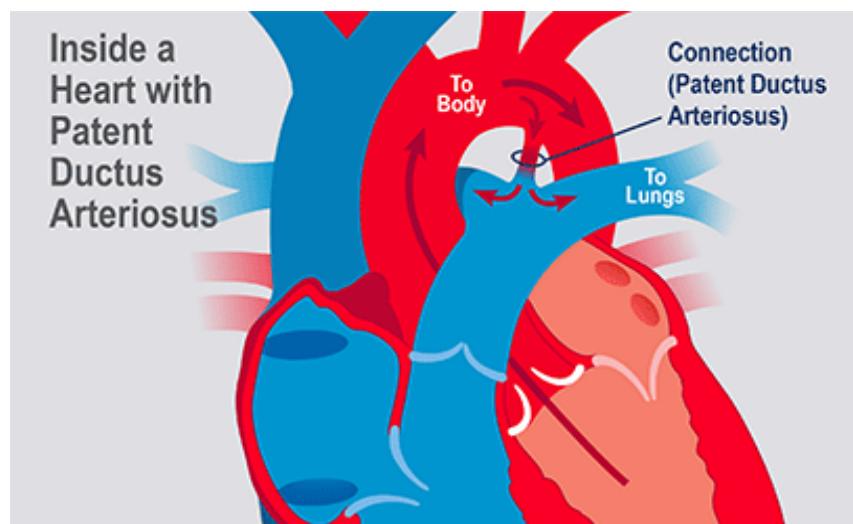
When a baby is born, the lungs fill with air and blood flows to the lungs. The ductus arteriosus will usually close within a couple of days in full term babies. In premature babies, the ductus arteriosus sometimes remains open.

This is called a patent (meaning open) ductus arteriosus.



What happens if the duct stays open?

If the duct stays open, it allows more blood than is needed to flow to the lungs. This means that the lungs need to work harder to breathe and increases the effort on the heart to pump blood around the body.



How will we know if the duct is open?

Your baby may:

- need more oxygen
- have a higher heart or breathing rate. This is because more blood flows back into the lungs and then back into the heart without going to the rest of the body. This means the heart has to work harder
- have more apnoeas (where they stop breathing).

The doctors will hear a heart murmur when they listen to your baby's heart.

Treatment

The doctor will discuss with you the most suitable treatment option. This may include:

- **No treatment.**
Often the duct will close by itself and not require any treatment
- **Medication**
The doctors may decide to try medication first. The medicine works to tighten the PDA, which closes the opening.
- **Surgical closure**
If medication does not work, sometimes (but not in most cases) surgery is required. A doctor will discuss this with you. The surgery is called a ligation.
Surgery is carried out at our hospital by a team of surgeons from the Royal Children's Hospital. A cardiac surgeon will explain what will happen to your baby and you will be asked to sign a consent form.

Further Information

If you have any questions regarding this information, please contact:

Mercy Hospital for Women

Neonatal Services
Phone: 03 8458 4685

Acknowledgements

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