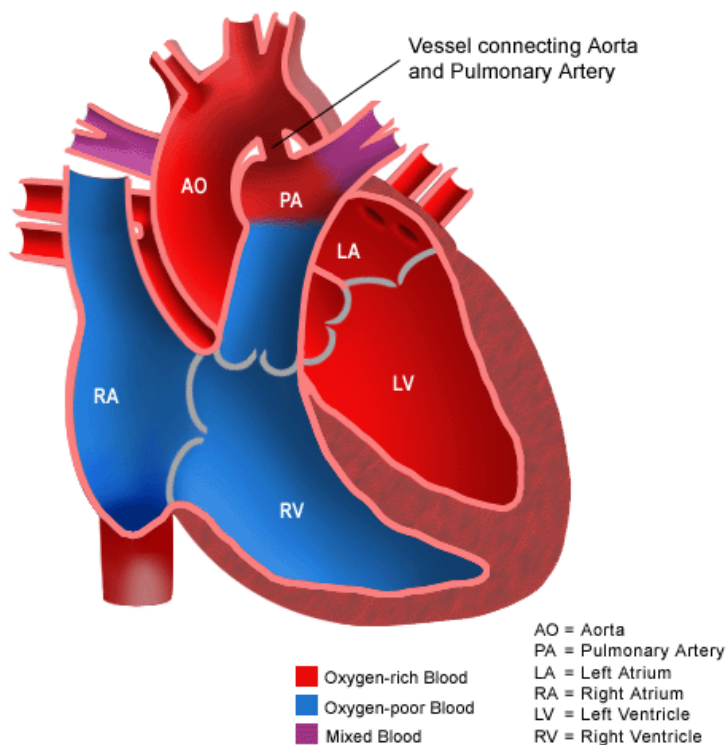


PATENT DUCTUS ARTERIOSUS

What is the ductus arteriosus?

The ductus arteriosus is a vessel that runs between the aorta (the big vessel leading from the heart that supplies blood to the body) and the pulmonary arteries (the vessels which supply blood to the lungs). While the baby is in the uterus the lungs are not needed as the placenta supplies oxygen to the baby. During this time in the uterus, blood heading towards the lungs in the pulmonary artery flows across the ductus arteriosus into the aorta, bypassing the lungs and goes to the rest of the body.

Patent Ductus Arteriosus (PDA)



fact sheet

What is a patent ductus arteriosus (PDA)?

At birth the ductus arteriosus is no longer needed, and in the majority of infants born at term, it closes naturally soon after birth.

In premature infants as a result of immaturity and low oxygen levels, the duct may not close. Patent means open, hence this is called a patent ductus arteriosus.

What problems can a PDA cause?

PDA's can occasionally cause difficulties weaning babies off the ventilator. They may also make babies susceptible to intraventricular haemorrhages (bleeds which can occur in the baby's brain)

How do we diagnose the presence of a PDA?

A PDA can sometimes be detected by a doctor's examination but is generally confirmed by an ultrasound of the baby's heart is performed (echocardiogram).

How do we close a PDA?

- Indomethacin and ibuprofen are drugs used to cause the duct to narrow.
- Sometimes we treat very premature infants with indomethacin and ibuprofen soon after birth to close the duct. This may be done if the baby is medically stable.
- Both drugs are successful in closing the duct in around 70% of cases. If they are unsuccessful at closing the duct or it is felt medically inappropriate, then an operation to close the duct may be required.

What does surgery to close the duct involve?

In some cases the operation can be performed here at the Canberra Hospital, but usually it requires transfer to Sydney.

The process involves transfer of your baby to one of two centres in Sydney, using the NSW Emergency Transport Service (NETS). Your baby is then moved to the operating room, attended by a nurse and a doctor from the nursery. After the anaesthetic is given, an incision is made in the left side of the chest, the duct is identified and a metal clip is placed across it. After the operation, the baby is transferred back to the nursery. The team in Sydney will describe the process in more detail. Some babies may be unwell following the operation as the left lung is collapsed during the surgery, and then reinflated. The baby usually recovers from the surgery within 24-48 hours. When your baby is well enough he/she will be transferred back to Canberra. Following his/her return we usually hope to have your baby breathing without the assistance of the ventilator in a few days.

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