

Patent Ductus Arteriosus (PDA)

What is a Patent Ductus Arteriosus (PDA)?

Before birth, the mother and placenta take care of the oxygen needs of the baby. The baby does not need to use their lungs. Only a small amount of blood goes to the lungs to help them grow.

The ductus arteriosus is a blood vessel outside the heart that allows most of the blood to bypass the lungs and go to the rest of the body.

When a baby is born the ductus is open (patent). After birth the baby must use their lungs to breathe in order to take in oxygen and get rid of carbon dioxide. All the blood needs to go to the lungs to pick up oxygen instead of going through the ductus. The ductus gradually narrows and then closes in the first few hours to days after birth.

What happens if the ductus does not close?

When the ductus does not close, some of the blood that should have gone to the body is returned to the lungs instead. This is too much blood for the lungs, and fluid in the lungs increases. This makes it harder for the baby to breathe. It also increases the work of the heart, and the baby could develop heart failure. This happens more often in premature babies, but can also happen in babies born at term.

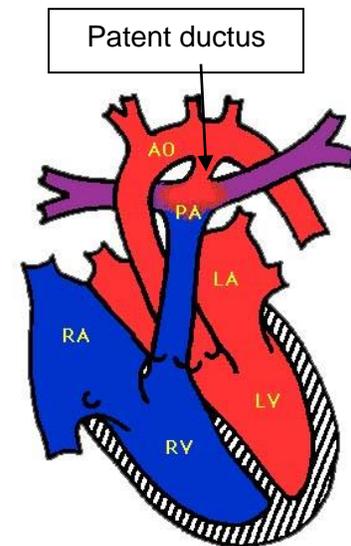
How do the doctors know if my baby has a PDA?

A test called an echocardiogram can show if your baby has a PDA. In this test, sound waves are used to give a picture of the baby's heart and find out the amount of blood flowing through the PDA. It is a painless test, like an ultrasound.

How is a PDA treated?

There are several ways to treat a PDA:

1. If the PDA is very small and there is only a tiny amount of blood flowing through it, the Doctors might decide to wait and see if it will close on its own.
2. A drug called indomethacin is the most common way to treat a PDA. It causes the PDA to narrow and often close. As the PDA narrows, less blood can flow through it. This drug can cause your baby to make less urine (pee). It is usually given in three doses. Sometimes more than one course of indomethacin is needed to close a PDA.
3. If the PDA will not close, or if the Doctors do not think your baby should have the drug, the PDA may be tied off through an incision (cut) in the baby's chest.



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