Patent Ductus Arteriosus

**What is a patent ductus arteriosus?**
The ductus arteriosus is an opening in the heart between the aorta (major artery leaving the heart) and the pulmonary artery (blood vessel that takes blood to the lungs). The ductus arteriosus normally stays open before birth so that the baby can get oxygen from the mother, since the baby’s lungs are not fully developed. After a baby is born and his or her lungs are working, the ductus arteriosus closes. A **patent ductus arteriosus** occurs when the ductus arteriosus does not close after birth. This allows a large amount of blood to travel to the lungs. The severity of the baby’s symptoms depends on the size of the PDA.

**What causes PDAs?**
Currently, the exact cause of PDAs is not known. Heredity likely plays a role in the development of all heart defects, meaning that if someone had a congenital heart defect, he or she has an increased chance of having a child with a heart defect.

**How are PDAs treated?**
Small PDAs may close spontaneously (without treatment). Depending on the size of the PDA, possible treatments may include medications, catheterization, and/or surgery. Your child’s doctor(s) will discuss appropriate treatment options with you.

**For more information**
American Heart Association - [http://www.americanheart.org/presenter.jhtml?identifier=11105](http://www.americanheart.org/presenter.jhtml?identifier=11105)
Cincinnati Children’s Hospital Medical Center’s Heart Center Encyclopedia – [http://www.cincinnatichildrens.org/health/heart-encyclopedia/default.htm](http://www.cincinnatichildrens.org/health/heart-encyclopedia/default.htm)

**Sources:** Cincinnati Children’s Hospital, American Heart Association