

PATENT DUCTUS ARTERIOSIS

SAINT BARNABAS MEDICAL CENTER
NEONATAL INTENSIVE CARE UNIT

What is a patent ductus arteriosis (PDA)?

Patent ductus arteriosis is an opening between two major vessels around the heart. Before a baby is born, this opening is normal. When a baby is born and starts to breathe on his or her own, this opening usually closes. If the opening doesn't close, it is called "patent ductus arteriosis".

This opening is between the artery that comes from the right side of the heart and the artery that comes from the left side of the heart. If the opening doesn't close, extra pressure is put on the right side of the heart and the lungs. This can lead to extra fluid in the lungs and heart failure.

What causes patent ductus arteriosis?

Often there is no known reason why the opening between the blood vessels doesn't close normally after birth.

What are the signs and symptoms of patent ductus arteriosis?

Signs and symptoms depend on how big the opening between the blood vessels is. If the opening is small, there may be no signs or symptoms. The most common signs and symptoms include:

- Heart murmur
- Fast breathing
- Fluctuations in oxygen needs
- Inability to wean from respirator or oxygen

How will my baby's patent ductus arteriosis be treated?

- The doctors may want to wait and see if the opening will close by itself.
- The doctors may limit the amount of fluid your baby receives in the IV or in feedings, in order to cut down on extra fluid in the lungs.
- In addition, your baby may receive medicines to get rid of the extra fluid in the lungs (called "diuretic" medicines).
- Your baby may receive a medicine which can help to close the patent ductus arteriosis.

- If your baby's PDA doesn't close with the medicine, or the baby is unable to receive this medicine, the opening will need to be closed surgically. This surgery can be done in the operating room here at Saint Barnabas Medical Center. Your baby's doctor will speak to you about the best options for your baby. The decision is made based on the size of your baby and any other associated medical problems.
- If surgery is needed, a small 1-2 inch incision is made in the area underneath the baby's armpit while undergoing general anesthesia. The surgeon is able to see the PDA through the incision and close it with a metal clip or cotton suture material. The metal clip and cotton sutures remain in place.
Small stitches placed under the skin will be used to close the incision. These stitches dissolve on their own. Immediately after surgery the incision will be covered with small steri-strips, which are small pieces of tape used to cover the incision.

If you have any further questions, please ask your nurse or doctor.