Closing Your Patent Ductus Arteriosus (PDA)

Information for patients and families

Read this booklet to learn:

• what a PDA is
• why it should be closed
• what to expect with this procedure
• what follow-up care you will need
What is a Patent Ductus Arteriosus (PDA)?
The ductus arteriosus is a large blood vessel in an unborn baby's heart. This is a normal part of a baby's blood flow before birth.

The ductus arteriosus is between the aorta and the pulmonary artery. The aorta carries blood away from the heart. The pulmonary artery takes blood from the body to the lungs.

When a baby is in the mother's uterus, their lungs are filled with fluid. The flow to their body is from the pulmonary artery to the aorta through this duct.

After a baby is born and begins to breathe, the ductus arteriosus usually closes on its own. But sometimes it stays open. This is called a Patent Ductus Arteriosus or PDA.
How do I know if I have a PDA?

Few adults have a PDA, or opening. They may not have any symptoms. Patients with larger PDAs may have shortness of breath when they do something physical.

Often, your doctor will find your PDA when they listen to your heart. They will hear an irregular sound, called a **murmur**. Your doctor can also use tests such as:

- an echocardiogram (an ultrasound of your heart)
- magnetic resonance imaging or MRI (a special kind of x-ray)
- a CT scan

These tests show where the blood flows in your heart.

Why should my PDA be closed?

Your PDA should be closed if your doctor can hear a murmur. This will prevent an infection called **endarteritis**. Endarteritis can be severe and lead to major health problems.

When your PDA is closed, your risk of infection is almost gone. If your PDA is large, closing your PDA could improve your shortness of breath.
What can I expect?
We will make an appointment for the procedure. Here are the steps you will go through:

1. **You have several tests.**
   Your doctor orders these for you. These may include:
   - an echocardiogram,
   - an electrocardiogram or ECG (checks the electrical activity in your heart)
   - x-rays
   - CT scan (takes pictures of your heart) or MRI
   - blood work

   **Please don’t eat or drink anything for 6 to 8 hours before your PDA closure.**

2. **On the day of your procedure:**
   Come to the **Eaton Building – 2nd Floor, Cath Lab, CICU, CVICU Waiting Area** at the Toronto General Hospital.

   You will have the procedure later that morning or afternoon. You will see Dr. Horlick, Dr. Osten or Dr. Benson at that time.

   There is a chance that your procedure may be cancelled if a more urgent situation comes up. If this happens, your procedure will be rescheduled as soon as possible.
3. For the procedure:
The procedure takes about 30 minutes. Here is what you can expect:

• You receive a local anesthetic in the groin area, using a needle. This numbs the area where we insert the tube.

• You receive a sedative and painkiller by intravenous (IV). These medicines help you stay relaxed and comfortable during the procedure.

• A small catheter or tube is put in your vein and artery at the groin site. The tube is moved up the vein into your heart.

• The tube is used to put a small plug called an Amplatzer Duct Occluder in your PDA. This plug blocks the blood from flowing through your PDA.

• We remove the tube and bring you back to your room. We observe you in the holding area for 20 minutes before we return you to your room.

• You lie flat for about 3 hours. While you are still in the hospital, your nurse will ask you to walk around. Once you are ready to walk, you can go home.
What can I do when I go home?

You can do normal activities as soon as you get home (such as walking around the house, making meals).

Wait 2 weeks before you start any exercises like running or weight lifting.

Avoid contact sports (like football or hockey) for 1 month.

Are there any side effects?

You may have a bruise in your groin. It will be near the area used in your procedure.

You may have some pain after this procedure. Please let your nurse know if you have pain. There is medicine available that will help.

Watch for more bruising or pain. If your bruising or pain gets worse, call your cardiologist or family doctor right away.

If your wound starts bleeding:

- Lie down right away.
- Press firmly with your fingers just above the wound. Do this until the bleeding stops.
- If the bleeding doesn’t stop after 30 minutes, go to your nearest emergency department.
- Tell the emergency team that you had your PDA closed.
During the first 6 months after your procedure, you need to take antibiotics if you are having:

- any dental work
- any surgery involving your bladder, stomach or lung

You will need to take an antibiotic at least 1 hour before your appointment. Your dentist or family doctor can give you the prescription. Please tell your doctor before you have any of these procedures.

**What follow-up care will I need?**

You will have a follow-up visit with Dr. Horlick or Dr. Osten 8 to 12 weeks after your procedure. Your appointment will be on the 5th floor, Ambulatory Cardiac Clinic. This is in the New Clinical Services Building, Toronto General Hospital.

The Congenital Cardiac Clinic will try to set up your appointment at the time that you are scheduled for your procedure.

If you need more information about your follow-up, please contact:

**Ambulatory Cardiac Clinic at:**
Phone: 416 340 5309
Toll-free: 1 888 UHN HART
Fax: 416 340 4127
Email: pmcc_acc@uhn.ca
Who can I contact for more information?

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