

# **PFO or ASD Closure:**

**Patent Foramen Ovale  
(PFO) or an Atrial Septal  
Defect (ASD)**

# PFO or ASD Closure

## What is a PFO or ASD closure?

- A PFO closure is done to help prevent a stroke.
- An ASD closure may be done to help prevent:
  - › The right side of your heart from getting bigger
  - › An irregular heartbeat (problem with the rate or rhythm of your heart)
  - › Pulmonary hypertension (high blood pressure in the lungs)
  - › Heart failure
  - › Stroke
- A PFO or ASD closure is done in the cardiac catheterization laboratory (cath lab).
- A puncture (small hole) is made in your groin. The cardiologist (heart doctor) will then put a special catheter (tube) through the hole into your vein.
- They will put a special closure device through the catheter and carefully move it to the right spot in your heart.
- When the device is in the right spot, your cardiologist will push it out of the catheter. When the device has been placed in your heart, it will open up and cover the hole in your heart.

- Over time, your heart tissue will grow over the device. This will keep the device in place and help it act like a part of your heart.

## What should I bring to the hospital?

- Please bring:
  - › Provincial health card
  - › Health insurance card
  - › Housecoat (bathrobe)
  - › Slippers
  - › Toothbrush and toothpaste
  - › Any food you may need (if you have special dietary needs)
  - › Your personal directive (if you have one)
  - › **All of your medications** in their original containers (this includes insulin supplies, over-the-counter medications, patches, inhalers, creams, ointments, vitamins and other supplements, herbal medications, and drops).
- **Do not** bring any valuables (like cash, debit or credit cards, chequebooks, jewelry) with you. The hospital is not responsible for the loss of any items.

## **Before your procedure**

- **Do not have anything to eat or drink (including candy) after midnight the night before your procedure.** You can take small sips of water.
- You will change into a hospital gown and housecoat in the Cardiac Short Stay Unit.
- A nurse will start an intravenous (I.V.) needle in a vein in your arm to give you fluids and medications.
- You will be taken down the hall to the cath lab and asked to lie on a special table.

## **During your procedure**

- You will be awake. You will be given medication to help you relax.
- You may be given a general anesthetic (medication to put you to sleep), if needed.
- If you need a general anesthetic:
  - › The anesthesiologist (a doctor who puts you to sleep for your procedure) will talk with you before the procedure.
  - › You will have a breathing tube and an esophageal echo probe put in your throat. These can cause a sore throat.
- You will see a camera above you and monitors (screens) on both sides of the table.

- Electrodes (sticky pads) will be put on your chest so that the cardiologist can monitor your heart.
- A nurse will clean the skin in your groin area where the cardiologist will put the catheter.
- Sterile (free of germs) cloths or drapes will be put over your legs, stomach (belly), and chest.
- The cardiologist will freeze your groin so that you do not feel the catheter and device being put in.
- The room will feel cold. If you are cold, ask the nurse for an extra blanket.
- Once the catheter is in place, the lights will be turned down so the cardiologist can see the monitors. The cardiologist will use a dye to get special images of your heart in order to do the procedure.
- The cardiologist will measure your heart and then move the closure device into the right spot.
- The procedure will take 1 to 2 hours.

## After your procedure

- The cardiologist will remove the catheter from your groin.
- There will be some bleeding from where the catheter was put in. To stop the bleeding, your cardiologist will put pressure on the area, or use a stitch to close the hole.
- They will put a bandage over the site.
- After the procedure, you will be taken back to the Cardiac Short Stay Unit.
- To prevent bleeding, you will need to lie flat with your leg straight for up to **6 hours**. You need a nurse to help you move. Ring your call bell first. **Do not try to move on your own.**
- The nurse will check your blood pressure and groin bandage often. **Call your nurse right away if:**
  - › you think you are bleeding (your groin feels wet, sticky, or warm).
  - › you have swelling in your groin.
  - › you feel numbness or tingling in your toes.
- Your groin may feel sore or tender. Ask your nurse for pain medication, if needed.
- You will need to drink more fluids than usual. This will help to flush the dye and prevent dehydration (not having enough fluids). Your cardiologist may want you to have I.V. fluids for a few hours to help with this.

- Your nurse will help you get up and out of bed after your bedrest. **Do not get up on your own for the first time.**
- You will then be taken for an X-ray.
- You will have an electrocardiogram (ECG/EKG). This test measures how your heart reacts to activity.
- You will stay in the hospital overnight so your health care team can monitor your pulse, blood pressure, and groin bandage.
- Your cardiologist will see you the morning after your procedure. They will take the stitch out of your groin.
- Before you go home, you will have an echocardiogram (a test that uses sound waves to make pictures of your heart) to check the position of the device. This test does not use radiation.
- You will go home between 10 a.m. and noon on the day after your procedure. **You must have a responsible adult take you home (by car, taxi, or bus). Do not leave the hospital on your own.**
- **You must have a responsible adult stay with you for the first 24 hours (1 day) after your procedure.**

## Care at home

- **Do not** do any activity that makes you strain or hold your breath for at least **30 days (one month) after your procedure.**
- **Do not** lift anything heavier than **10 pounds** for at least **one month after your procedure.** Your cardiologist will give you instructions about activity and lifting before you go home.
- You can take your groin bandage off **24 hours after** you go home.
- Check your groin **each day** for signs of infection:
  - › More redness at the hole in your groin
  - › More drainage or fluid from the hole
  - › Fever (temperature above 38 °C/100.4 °F)
  - › Chills
- If you have any signs of infection, see your primary health care provider (family doctor or nurse practitioner), or go to an urgent treatment centre or a walk-in clinic right away.
- Wash your groin **gently** with soap and water. Your nurse will give you a small bandage to put on.
- You can shower **24 hours after** your procedure. **Do not** let the water spray directly on your groin area. It is best to stand with your back to the water.

- **Do not have a tub bath, swim, or use a hot tub for 4 to 5 days after your procedure.** Make sure the hole in your groin is well healed first.
- To prevent blood clots from forming, you will need to take medications (like aspirin or Plavix®) every day **for the next 6 months.** You will be given a prescription before you leave the hospital.
- See your primary health care provider if this medication causes side effects. **Do not stop taking this medication unless your cardiologist tells you to.**
- To lower the risk of getting an infection in your heart, you will need to take antibiotics before you have any procedure that causes bleeding (like dental work, teeth cleaning, major tests or surgery) **for at least 6 months.**
- Your primary health care provider will tell you if you need to take antibiotics for longer than 6 months.

## Your closure device

- Before you leave the hospital, you will be given an ID card that says you have a closure device in your heart. **Always carry it with you to show to health care providers who are treating you.**
- Your closure device will **not** set off metal detector alarms at airports.
- You can safely have an MRI test with your closure device.
- Your device **will** be seen on X-rays.

### Important

It is very important to go to all of your follow-up appointments.

**Call your primary health care provider or go to the nearest Emergency Department right away if you:**

- › Have chest pain
- › Have shortness of breath or trouble breathing
- › Feel light-headed or like you are going to faint
- › Have an irregular heartbeat

# Notes:

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This pamphlet is for educational purposes only. It is not intended to replace the advice or professional judgment of a health care provider. The information may not apply to all situations. If you have any questions, please ask your health care provider.

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Connect with a registered nurse in Nova Scotia any time:  
Call 811 or visit: <https://811.novascotia.ca>

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