

## Your guide to Percutaneous Heart Valve Surgery

This booklet has a lot of information in it. We hope it answers many of your questions. We know it may feel overwhelming to try and read it all at once. Take your time. Refer to this booklet often. Write down any questions you may have. Bring this booklet and your questions with you to all of your appointments and when you come for your procedure. We will go over the information with you and explain anything you are not sure about.

Your cardiologist (heart doctor) has determined that you need to have a valve in your heart replaced. 'Percutaneous' means the new valve is guided into place using a large blood vessel in your groin instead of having open-heart surgery.

### **Do I have to be admitted to the hospital?**

Yes you do. You are admitted on the morning of your procedure. Please be aware that you need to stay in the hospital for 4-7 days. Sometimes, people may need to stay longer.

## **Before the procedure...**

### **Things to think about**

Planning ahead for your personal and financial affairs is very important. Our social workers are available to assist and advise you if necessary. The St. Paul's Hospital Website [www.heartcentre.ca](http://www.heartcentre.ca) also has information on planning ahead for patients and families.

Plan your return trip home. Start thinking about what you need to arrange. This includes road transport, flights and payment. We suggest you arrange for someone to travel with you.

If you are brought to the hospital by ambulance, remember that ambulance services are not used to return people to their homes. Planning ahead and arranging how you will get home helps make your hospital stay smoother.

### **Do I need any tests before the procedure?**

Once your doctor decides that you need the valve procedure, you need to come for an appointment in the Pre-Assessment Clinic. Someone will phone you to set up the appointment. This visit will take about 3 hours.

During this visit, we ask about your health history, your current medicines, any allergies you might have, and if you have had an anesthetic in the past. One of our

doctors who has special training in anaesthesia (an-as-THEE-sha) sees you, asks you a few questions, and examines you. This doctor is called an anaesthesiologist and helps you sleep through surgery without pain and wakes you up when surgery is over. We may have you get some blood tests done at this time.

You may also need to come have a scan of your blood vessels, but your cardiologist (heart doctor) will let you know if this is needed.

### **What do I need to bring with me to the hospital?**

Bring with you the clothes, shoes and coat you will need to wear home.

Also bring other personal things (such as a toothbrush, glasses) you may need during your hospital stay.

Do not bring a lot of cash, valuables or a lot of personal items and clothing.

### **How to I prepare for the procedure?**

1. From midnight (12:00am) the night before the procedure: You **must not eat anything (no solid food)**. At this point, you can still drink clear fluids such as water, apple juice and tea.
2. Three (3) hours before you are to arrive at St. Paul's Hospital: **Stop drinking completely**. From this point on, you are not to drink or eat anything. We need your stomach as empty as possible.

### **What about taking my medicine?**

Unless your doctor tells you something different, take all of your usual medicines with a sip of water in the morning.

Bring all your medicines in their original bottles to the hospital.

**If you take insulin or pills for diabetes, aspirin or blood thinners, we will give you more specific instructions**

## **The day of the procedure...**

### **Where at St. Paul's do I go?**

Come to the Reception Desk in the Outpatient area on the 5<sup>th</sup> floor of the Providence Wing. Follow the blue line from the main entrance all the way to the bank of elevators. If coming from the parkade, take the elevator up to the 5<sup>th</sup> floor.

### **What happens before the procedure?**

- Tell the cardiologist or nurse if you have any allergies.
- You change into a hospital gown
- The nurse asks you some questions about your health history.
- We start an intravenous (IV). To do this, we use a needle to insert a small flexible tube into a vein in one of your hands or arms.

- We may take some blood for testing (if not already done).
- We may give you some medicine to help you relax.
- The nurse shaves a small area around your groin.
- We get you to remove your denture(s), glasses and hearing aide(s) just before you go for the procedure.
- We take you to the catheterization lab (we call it the ‘Cath Lab’) for the procedure.

### **Will I be awake for the procedure?**

No. You are given medicine called a **general anesthetic**. This medicine makes it so you sleep through surgery and do not feel any pain.

While you are asleep, a breathing tube is put into your lungs through your mouth to help you breathe. This is connected to a breathing machine called a ventilator. Usually the tube is removed as you are waking up

### **What happens during the procedure?**

- You are given medicine to relax you.
- You lie on an X-ray table. We place a pillow under your knees for comfort and tuck a warm blanket around you.
- The anaesthesiologist gives you the medicine to make you “fall asleep”.

While you are asleep, here is what happens...

- The breathing tube is then inserted to help you breathe during the procedure.
- A catheter is put into your bladder to drain urine.
- You are connected to a heart monitor. This allows us to monitor your heart rhythm and blood pressure during the procedure.
- The nurse cleans both of your groins with a cleaning solution.
- The nurse places a sterile (germ-free) drape over you to keep the area clean.
- The cardiologist inserts a large IV called a “sheath” into a large blood vessel near the groin.
- Through this IV, the cardiologist guides small plastic tubes containing the valve to the area.

These procedures generally take 3-4 hours and sometimes longer.

## **After the procedure...**

### **What happens after the procedure?**

**You stay in a Recovery Area for about 1-3 hours.**

The nurses:

- Connect you to the heart monitor.

- Check on you frequently, including measuring your blood pressure and checking your leg.

The breathing tube is usually taken out at the end of the procedure but you may still have the breathing tube for a short time after the procedure.

The intravenous line (IV line) is still in your arm. We use this to give you fluids.

The catheter is in your bladder to drain your urine into a collection bag. You may feel like you have to go to the toilet but the tube drains your urine for you.

You cannot eat or drink until we tell you it is ok.

You need to lie flat with your legs straight. There may still be tubes in your groins. We remind you of this should you try to bend your legs.

Tell us if you are having pain or discomfort.

**After the Recovery Area, you are taken to the Coronary Care Unit (CCU). You stay here for 1-2 days.**

Usually, on the evening of the procedure:

- You will be helped to stand by your bedside.
- The nurse will let you know when you can eat.

Usually, the day after the procedure:

- We take the catheter in your bladder out.
- We take out the intravenous in your arm.
- We get you up and help you walk a short distance.

**When you are well enough, you are moved to the Cardiac (heart) Ward 5A until you are ready to go home. This is usually 3-5 days.**

This is where you get ready to go home from the hospital.

We help you increase your activity and get you to take walks in the halls.

You are sent for an echocardiogram (ultrasound of the heart) and an x-ray to check on your new valve.

If you need help at home, such as nursing care, this is when it is arranged.

**Before you go home, we:**

- Explain your medicines,
- Go through what activities you can and cannot do, and
- When to make doctors' appointments.

**At home...**

**Puncture Site**

You may notice a small bruise or soft lump around the hole or puncture site where the tube was placed for the procedure. This is normal.

**It is not normal** if the lump suddenly gets bigger or harder. **This means you are bleeding.** If this should happen you must:

- Lie down
- Ask someone to **press down hard for 15 minutes** just above the hole where the procedure was done.
- You know if you are doing this right if the lump does not get bigger or harder.
- **Do not stop** pressing to check under your fingers during the first 15 minutes.
- If the bleeding has stopped after 15 minutes, rest and **stay lying down for 2 more hours.**
- If the bleeding does not stop, call 911 for an ambulance to take you to the hospital. Do not drive yourself or have anyone else drive you.

### **Dressing**

Unless we tell you something different, you can take the dressing off of the puncture site in your groin 1 day after you return home.

### **Medicines**

Your medicines are an important part of your treatment. Let your doctor know if any of your medicines cause any unpleasant reactions or side effects. But do not stop taking them unless your doctor tells you to do so.

While you are recovering, it is important that you do no things that could stress either the puncture site in your groin or your new valve.

#### **Activity**

No lifting, pushing or pulling anything that weights more than 10 pounds for 5 days.

Even though you may feel ready to resume your normal activity, you should take it easy for at least one month.

#### **Driving/Travelling**

You should not drive for one month following the procedure.

If you are travelling to get home from the hospital, sit with your legs stretched out. Get up and walk every hour during that first day.

If traveling for long periods during the month following the procedure, try and sit with your legs stretched out. Get up and walk every hour or so.

From now on...

If you get any dental work done, when making your appointment make sure you tell them you have an artificial heart valve. You may need to take antibiotics before dental work including getting your teeth cleaned. Talk to your doctor about this as well.

**For more information about heart disease, try these websites:**

[www.heartbc.ca](http://www.heartbc.ca)

[www.americanheart.org](http://www.americanheart.org)  
[www.heartcentre.ca](http://www.heartcentre.ca)

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