# **Preparing for the MitraClip Procedure**

#### Your mitral valve:

- The heart has 4 valves that open and close with each heartbeat.
- The mitral valve separates the upper and lower chambers on the left side of the heart.
- Your mitral valve is leaking because it is not closing properly.
- This leak is making it harder for your heart to pump blood properly, and may be causing you to feel short of breath and unwell.





### The MitraClip procedure:

- Most people who have a very leaky valve need surgery to repair or replace the valve.
- Your doctors have recommended that you have a "Mitra-Clip" procedure to repair your valve. This procedure uses a small clip to close the part that's not closing properly. This makes the leak smaller.
- You will not have "open heart surgery".
- The clip is placed though the large vein in your groin with the use of "catheters" (hollow flexible tubes that are removed).

## The day of your procedure:

- You will come to the Cardiac Investigation Unit (CIU), on the 7<sup>th</sup> floor of the Cardinal Carter North Wing. You will be given specific directions about how to get there and what time to arrive
- Do not eat or drink anything after midnight (12:00 a.m.) the night before your procedure.
- Take the medications you usually take in the morning with a small sip of water.
- You will be given special instructions for some of your medications, specifically any diabetes medications, blood thinners, and diuretics (water pills). The nurse will give you instructions about when to stop taking these medications before your procedure.

# What should you bring to the hospital?

- Toothbrush and toothpaste; Comb or brush
- Slippers (with non-slip soles)
- Glasses
- Hearing aid(s)
- Your walking aid, such as a cane or walker
- Bring only a few personal items. It is best if your family can keep your clothes.
- Do not bring a lot of cash or valuables. There will not be a place to lock them up.

## What happens during the procedure?

- Once you are ready, we move you to the Cardiac Cath Lab and prepare you for the procedure.
- We start an intravenous (intra meaning 'into' and venous meaning 'vein, commonly called an IV) and attach you to a heart monitor.
- The anesthesiologist (sleep doctor) gives you an anesthetic so you sleep or are very relaxed during the procedure.
- 'General anaesthesia' means we give you medicines that cause all your muscles to completely relax, including muscles used to breathe. Once you are asleep, the doctor puts a breathing tube down your throat and into your lungs to protect your lungs from any fluid accidently getting into your lungs
- We start a second intravenous. This one is placed in a large vein in your groin area.
- The MitraClip procedure can take between 2 and 4 hours.

## What happens right after the procedure?

- You will be moved to the Cardiac Investigation Unit Recovery area.
- For most people who receive a general anaesthesia, the breathing tube is removed in the procedure room, or as soon as it is safe to remove it. If you wake up with the tube in place, do not worry. We tell you what to do and how to communicate with us.

## This is what you can expect when you wake up:

### **Equipment**

You will be attached to a heart monitor. You will have an intravenous in your arm, and maybe one in your neck. Our goal is to remove this equipment as soon as possible, often the same day as your procedure.

### Positioning and activity

You will lie flat for the first 3 to 4 hours and we will remind you to keep your leg straight. This is to make sure that you don't start to bleed through the small opening we made in your groin. The nurse will check your groin area frequently. Our goal is to get you sitting in bed, then in a chair, and then walking the evening of your procedure.

#### **Nutrition**

Once the effects of your anaesthesia are gone and you feel well enough, you can start drinking clear fluids, and progress to eating.

#### Pain and Discomfort

We do not expect you to have much pain or discomfort. If you do, it's important to tell your nurse.

#### **Visitors**

• Your doctor will speak with your family after the procedure. It is best for them to wait in the waiting room near the entrance to the CIU. Your family will be able to see you.

## Recovering and preparing to go home:

#### Dressing care

Your nurse will change and remove your dressing in your groin as necessary.

#### Tests

Before you leave the hospital, you will have a chest x-ray and another echocardiogram (the ultrasound test of your heart) to check the clip position. You may also have some more blood tests.

### Length of stay

Plan to be discharged from the hospital the day after the procedure.

### **Getting home**

You must make your own arrangements for your trip home. This includes road transport, flights, and accommodation payment. We suggest you arrange to have someone travel with you for the trip home.

#### Help at home

You may need help when you first go home. It is hard to predict how much help you will need, and for how long. It is best to plan ahead so that you are sure to have the help you need at home. We suggest you arrange to have someone stay with you for the first two days or longer to help you recover. If you are from far outside of the Toronto area, we suggest you stay at least one night close to the hospital before your trip home.

#### Activity

To help you recover, it's important to balance rest and activity. You will slowly increase your activity every day, and expect to be back to your normal activity within one to two weeks of the procedure.

## Follow-up:

• Approximately 6 to 8 weeks after your procedure, you will come back to St. Michael's Hospital for an echocardiogram (the ultrasound test of your heart) and a clinic visit. We will mail you the details of this appointment.

# Some words you will hear:

- **Catheter:** A tube used for gaining access to the inside of the body. In MitraClip therapy, a catheter is inserted at the groin to access the mitral valve of the heart. It is removed at the end of the procedure.
- Echocardiogram: Ultrasound of the heart.
- **Mitral Regurgitation:** A disorder of the heart in which the mitral valve does not close properly when the heart pumps blood, and blood flows backwards.
- **Mitral Valve** A valve in the heart that lies between the left atrium and the left ventricle. The valve allows oxygen-rich blood to flow into the left ventricle, and then closes to prevent blood flowing back.

# Some helpful telephone numbers:

• Structural Heart Clinic: 416-864-5442