

# Mitral Clip Procedure

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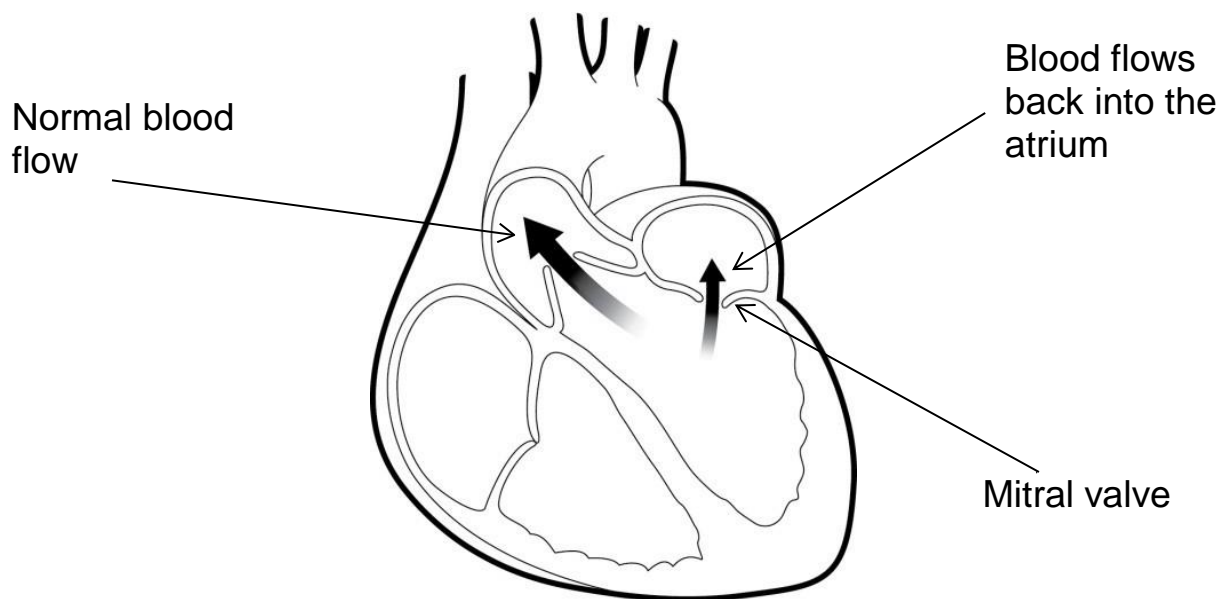
You have been referred to the Hamilton General Hospital to assess if having your mitral heart valve repaired with a mitral clip is right for you.

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## What is mitral regurgitation?

Regurgitation occurs when the mitral valve does not close properly. As a result, blood flows back into the atrium.

This can cause you to feel fatigue, short of breath and have swollen feet or ankles.



**The Heart**

Possible causes of mitral regurgitation include:

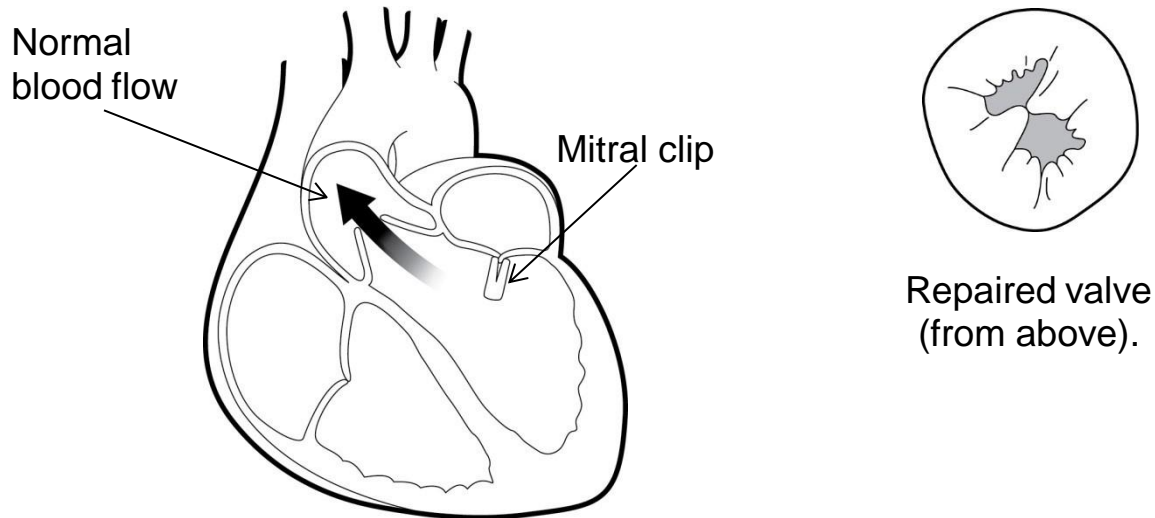
- a previous heart attack
- an abnormality of the heart muscle (cardiomyopathy)
- infection of the lining around the heart (endocarditis)
- rheumatic fever

Mitral regurgitation is one of the most common valve disorders.

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## What is a mitral clip procedure?

A mitral clip procedure is a repair of your mitral valve by placing a MitraClip® device on the leaking portions of the valve.

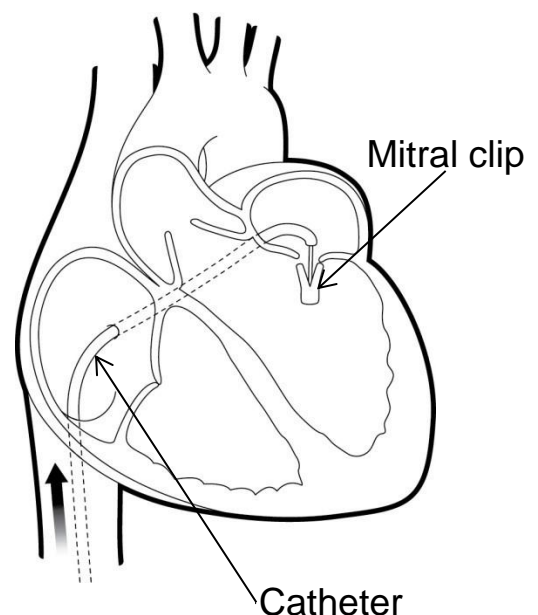


The procedure is different from open heart surgery as your doctor does not cut through your sternal bone and the recovery time is usually very short. You will be put to sleep by an anesthesiologist and will have a breathing tube. This will be done with a general anesthetic.

A mitral clip procedure is done using a transvenous approach. This involves putting a small puncture into the femoral vein (a blood vessel in the groin).

A small thin hollow tube, called a catheter, is inserted and is guided up into the heart. The mitral clip is put into your heart through the catheter.

The repair is effective right away.



In order for the procedure to go safely, you will also have:

- a transesophageal echocardiogram (TEE) to take pictures of your heart allowing the doctors to clearly see your mitral valve
- a small tube in one of the veins in your neck
- a special monitoring tube in the artery of your wrist

All these tubes will be removed once you have recovered from the procedure.

To watch a video of the procedure, go to: <https://mitraclip.com/>

## **The MitraClip®**

The MitraClip® device (implant) is made with a special metal called Cobalt Chromium. The clip is covered with a polyester mesh that allows your body to heal over with new tissue.

Depending on the nature of your valve disorder, there is the possibility that you may receive more than one clip.

## **What are the risks?**

The risks vary with each person and are related to your health condition.

Your doctor will explain the risks to you before the procedure.

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## **What tests do I need to have to see if I am a candidate for Mitral Clip?**

Some of these tests may need to be repeated at Hamilton General Hospital after you have been seen by the Mitral Clip team.

- Physical exam.
- Blood test (complete blood count, electrolytes, kidney function, and blood clotting).
- Echocardiogram – A special type of ultrasound that uses sound waves to take pictures of your heart.
- Transesophageal echocardiogram (TEE) – A special type of ultrasound that uses sound waves to take pictures of your heart. The pictures are taken from inside the esophagus.

## **What should I expect before the procedure?**

- Meeting with a Mitral Clip team cardiologist or surgeon.
  - Undergo all needed tests and attend a Pre-Op Clinic at McMaster University Medical Centre (MUMC).
  - If you are on blood thinners, you may be asked to see the Thrombosis Clinic at Hamilton General Hospital before your procedure.
  - If you have a pacemaker, you may be asked to see the Pacemaker Clinic at the Hamilton General Hospital before your procedure.
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## **Admission to Hamilton General Hospital**

You will be admitted the morning of your procedure. The Pre-Op Clinic will provide you with instructions.

- You may eat or drink until 12:00 midnight the night before your procedure.
- You will be given instructions on what medications you may take the morning of your procedure. Take with only a sip of water.
- Bring all of your current medications in their original containers.
- Bring a pair of slippers with a back and non-slip sole.
- Bring your personal care items, such as a toothbrush, toothpaste, shampoo, soap and a housecoat.
- Leave money, credit cards, jewellery and valuables at home.
- When you arrive at the Hamilton General Hospital, go to Patient Registration on the Main Level.
- After you have registered, you will be admitted to the Heart Investigation Unit (HIU) on the 3<sup>rd</sup> floor.

## **Day of your procedure**

- Your nurse will shave small areas on your groins and wrists, then clean those areas with a special antiseptic soap.
  - During your procedure your family may wait in the 3<sup>rd</sup> floor waiting room. The doctor will talk to your family after your procedure is done.
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## Procedure

- When you arrive in the procedure room you will notice the room is very busy with nurses, x-ray technicians and doctors preparing for your procedure.
- You may have a catheter put in your bladder.
- You will have small tubes in your groins, neck and wrist.
- You will have a transesophageal echocardiogram (TEE).
- The procedure takes about 2 to 4 hours.

## What should I expect after the procedure?

- The breathing tube will be taken out in the procedure room or in the Coronary Care Unit (CCU). You will recover in the CCU on the 4th floor.
  - You may experience some mild discomfort in your throat from the TEE probe. This will subside usually within 24 hours.
  - For the first couple of hours your nurse will remind you to keep your legs straight to allow the access site(s) to heal.
  - You will gradually increase your mobility with the help of nurses. You will likely be expected to get out of bed several hours after the procedure, depending on your overall well being.
  - You will continue to wear a cardiac monitor while in the hospital.
  - You will have blood tests, electrocardiograms (ECGs) and x-rays done many times during your stay.
  - You will have an echocardiogram (ultrasound of your heart) before you are discharged home.
  - Your nurse and/or doctor will check your groin/wrist sites to make sure they are healing properly. The sutures in your groin will be removed before you go home.
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## Going home

- Have a family member or friend bring in your clothes and shoes.
- Take short walks daily as tolerated and gradually increase with time.
- Avoid strenuous activity or heavy lifting (nothing over 5 pounds) for one week.
- Do not go to the dentist for 3 to 6 months following your mitral clip procedure unless you have an abscess or toothache. When you do go to the dentist you need to take antibiotics before each visit. This will help prevent an infection. Your dentist or family doctor can give you a prescription for the antibiotic.

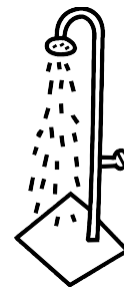
Most patients will be discharged home within 24 to 48 hours after the procedure. Some of your medications may be adjusted by your doctors before you go home.

## Care of your access sites

Know what your access sites (where the catheter was inserted into your wrist and groin) look and feel like before you leave the hospital. It may be tender and slightly red, have a small lump or mild swelling. This will heal over time.

### Taking a bath or shower

- You may have a shower the morning after the procedure.
- Do not let your access site go under water for at least 3 days.
- You may have a bath once your access sites are healed. Healing is when the access sites are dry with no open areas and no drainage. This is usually 72 hours.





## Call your doctor if you notice

- Pain at the access site.
- An increase in bruising or swelling from when you left the hospital.
- If you develop a lump larger than a golf ball at the access site.
- Redness, warmth to touch or pus draining from the access site.
- Fever greater than 38°C or 101°F, or chills.

If your doctor is NOT available,  
go to an Urgent Care Centre.

If you have worsening shortness of breath within the first few weeks after the procedure, see your doctor or go to an Urgent Care Centre right away.

## If you develop any sudden severe pain or notice bright red blood at the access site

- Apply pressure and call 911 right away.
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## The Mitral Clip Team

The team is made up of several doctors, nurses and radiology technicians.

You will meet with one of the Mitral Clip doctors in consultation and that doctor will discuss your case with all members of the Mitral Clip team.

On the day of your procedure you may meet a different doctor or surgeon. However, the doctors work as a team and each doctor will be aware of your history.

## Follow-up appointments

- Your Cardiologists – 2 to 4 weeks
- Mitral Clip Team – 4 to 6 weeks
- Echocardiogram at 4 to 6 weeks and 1 year



If you have any questions or concerns, please contact the Mitral Clip team at 905- 521-2100, ext. 49069.

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