



MITRAL REGURGITATION

**LEARN HOW THE MINIMALLY INVASIVE  
MITRACLIP PROCEDURE MAY HELP YOU**

Patient Guide



**Norwest**  
PRIVATE HOSPITAL  
by Healthscope

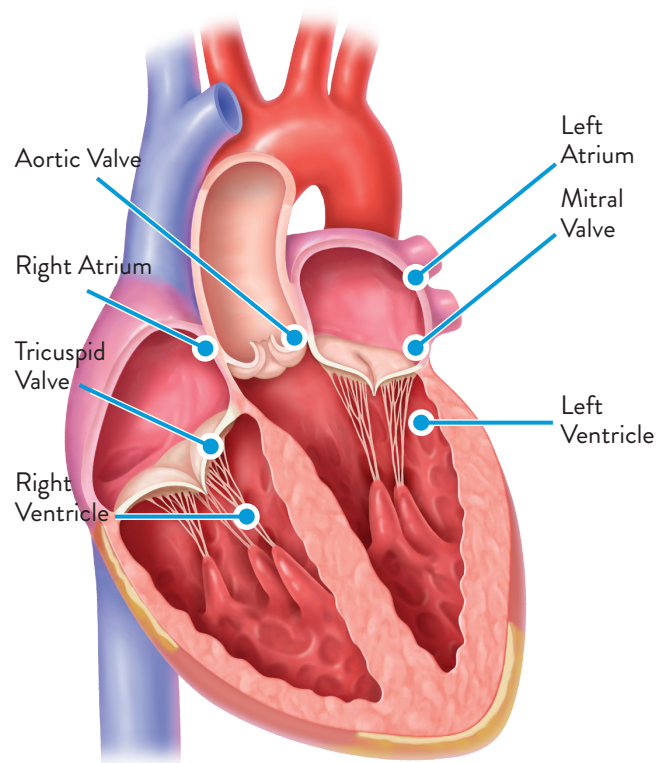
# UNDERSTANDING YOUR HEART

How does the heart work?

Your heart beats thousands of times per day, pumping dozens of litres of blood each hour. It pumps blood through your lungs, where the blood is replenished with oxygen, and pumps it back out to the rest of your body.

The heart has four chambers; the upper two chambers are called the **right atrium** and **left atrium**, and the lower two are called the **right ventricle** and **left ventricle**.

**Heart valves** are the doorways between these chambers. They open to let blood pass from one chamber to the next, closing quickly between heartbeats so blood does not flow backward.

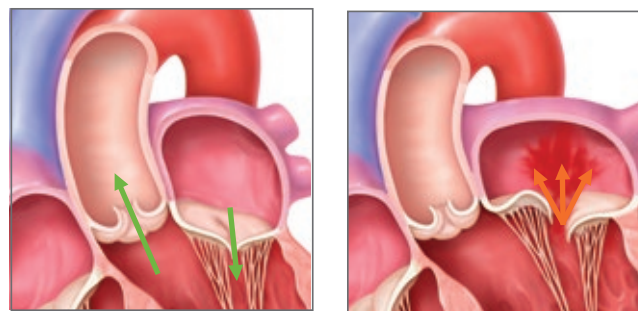


Note: pulmonary valve not shown

# WHAT IS MITRAL REGURGITATION?

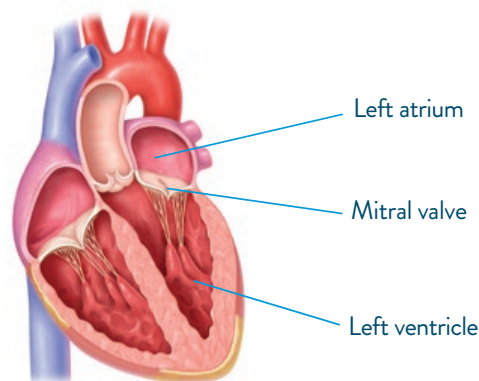
The mitral valve is located between your heart's two left chambers. The mitral valve has two flaps of tissue called leaflets that open and close to ensure that blood flows in only one direction. When the mitral valve fails to close completely, blood leaks backward — a condition called mitral regurgitation.

One type of mitral regurgitation (MR) is called primary (or degenerative) mitral regurgitation. It can be related to age, a birth defect, or underlying heart disease. The other type is called secondary (or functional) mitral regurgitation. It is caused by heart disease that leads to an enlarged left ventricle.



Normally functioning mitral valve

Mitral regurgitation



MR places an extra burden on your heart and lungs. Over time, some people may develop an enlarged heart because it has to work harder to function properly.

If left untreated, MR can cause other, more serious problems to your heart, such as heart failure, a condition that occurs when your heart can't pump enough blood to meet the needs of your body.



## AM I EXPERIENCING SYMPTOMS OF MITRAL REGURGITATION?

In some cases, you may have MR but not experience any symptoms. In other cases, you may experience MR symptoms listed below.

If you are experiencing any of these symptoms, talk to your doctor to receive a thorough examination and diagnosis. You should also seek advice if you notice that your symptoms are getting worse—for example, if the swelling in your feet and ankles has increased or if you find it more difficult to perform daily activities such as walking up the stairs.

- Fatigue
- Inability to exercise
- Decrease in appetite
- Presence of a heart murmur
- Dry, hacking cough (often worse when lying down)
- Shortness of breath (especially at night)
- Fainting
- Weight gain from retaining fluid
- Accumulation of fluid in feet,

# WHAT ARE MY TREATMENT OPTIONS?

Treatment depends on how bad your condition is and if it's getting worse. Consult with your doctor to discuss all treatment options, risks, and benefits. Only your doctor can help you decide which option is right for you.



## MEDICATIONS

Your doctor may prescribe medications to manage your symptoms. However, these will only treat MR symptoms and cannot eliminate the root causes.<sup>11</sup>



## SURGERY

Depending on the root cause of the MR, severity, and symptoms, your physician may recommend open-heart surgery to have the mitral valve repaired or replaced.



## CARDIAC RESYNCHRONISATION THERAPY (CRT)

CRT is a potential treatment option for patients that helps improve the heart rhythm and increases blood flow to help treat heart failure symptoms.



## TRANSCATHETER MITRAL VALVE REPAIR

If you meet certain criteria, your physician may recommend a procedure which is less invasive compared to open-heart surgery: transcatheter mitral valve repair.

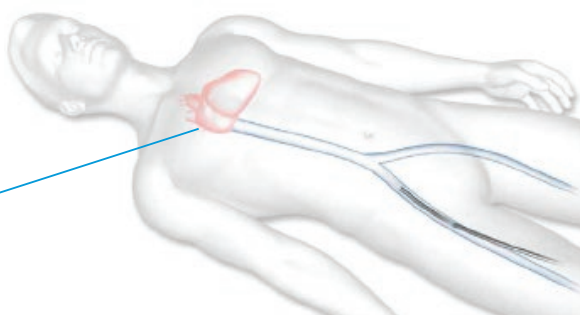
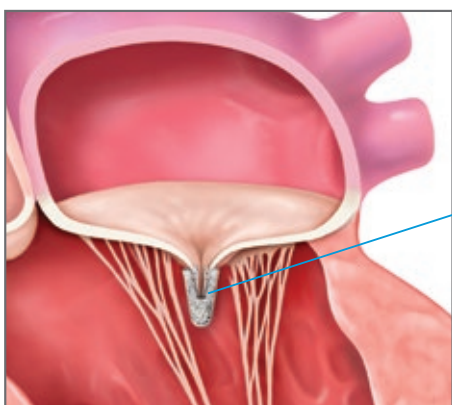


# MITRACLIP. THE MINIMALLY INVASIVE THERAPY

## WHAT ARE THE BENEFITS OF TRANSCATHETER MITRAL VALVE REPAIR?



Transcatheter mitral valve repair is a minimally invasive treatment to repair your leaking mitral valve using a clip resembling a clothes-peg.



The entire system is introduced through a vein in the groin area and advanced to the heart.



### MINIMALLY INVASIVE BEATING HEART PROCEDURE

Less invasive than traditional open-heart surgery, the device is implanted via a small tube, or catheter, inserted through an incision in your upper leg.



### IMPROVED QUALITY OF LIFE

Most patients experience improvement in symptoms and quality of life after the procedure.<sup>15</sup>



### PROVEN THERAPY

Included in the medical guidelines for treating mitral regurgitation, and proven safe and effective with over 15 years of use, reaching 100,000 patients treated, and more than 1,000 scientific publications.<sup>12</sup>



### SHORT HOSPITAL STAY

Patients are usually released from the hospital within one to five days, significantly less time compared to surgery.<sup>13</sup>

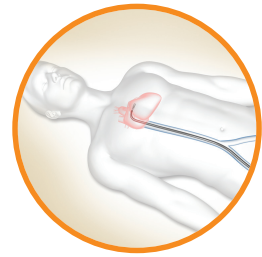
# WHAT HAPPENS DURING THE MINIMALLY INVASIVE TREATMENT?

Your procedure will most likely be performed in a specialized room at the hospital called a “cath lab.” During the procedure, you will be placed under general anesthesia to put you in a deep sleep, and a ventilator will be used to help you breathe. Your doctor will use fluoroscopy (a type of X-ray that delivers radiation to you) and echocardiography (a type of ultrasound) during the procedure to visualize your heart. On average, the time required to perform the TMVr procedure is between 3 to 4 hours. However, the length of the procedure can vary due to differences in anatomy.

The following steps provide a general overview of the Transcatheter Mitral Valve repair procedure with the MitraClip device—your experience may be different. Your doctor will explain the procedure to you and can provide you with specific details and answer any questions you may have.

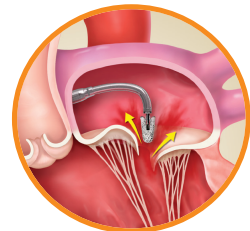
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Your doctor will make a small incision in your upper leg, where a guide catheter (a hollow, flexible tube slightly larger than the diameter of a pencil) will be inserted through a vein to reach your heart.



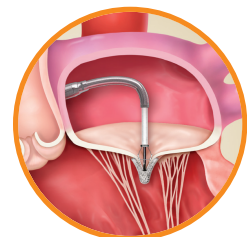
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The clip, which is attached to the end of a clip delivery system, will be guided to your mitral valve through the catheter. Your doctor will use imaging equipment to guide the placement of the clip.



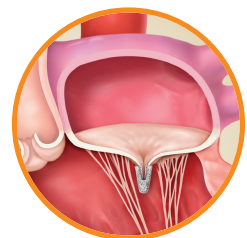
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Your doctor will implant the clip at the appropriate position on your mitral valve. The clip will grasp the mitral valve leaflets to close the centre of the mitral valve and reduce mitral regurgitation. Your doctor will then perform tests to confirm that the clip is working properly. In some cases, your doctor may implant a second clip for further reduction of mitral regurgitation.



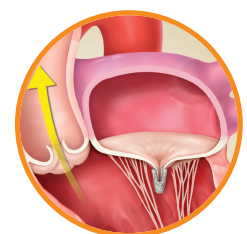
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Once the clip is in place and working properly, it will be disconnected from the clip delivery system and the guide catheter will then be removed from your body and the incision in your leg will be closed.



5

The implanted clip will become a permanent part of your heart, allowing your mitral valve to close more tightly and reduce the backward flow of blood.



## WHAT WILL HAPPEN AFTER YOUR PROCEDURE?

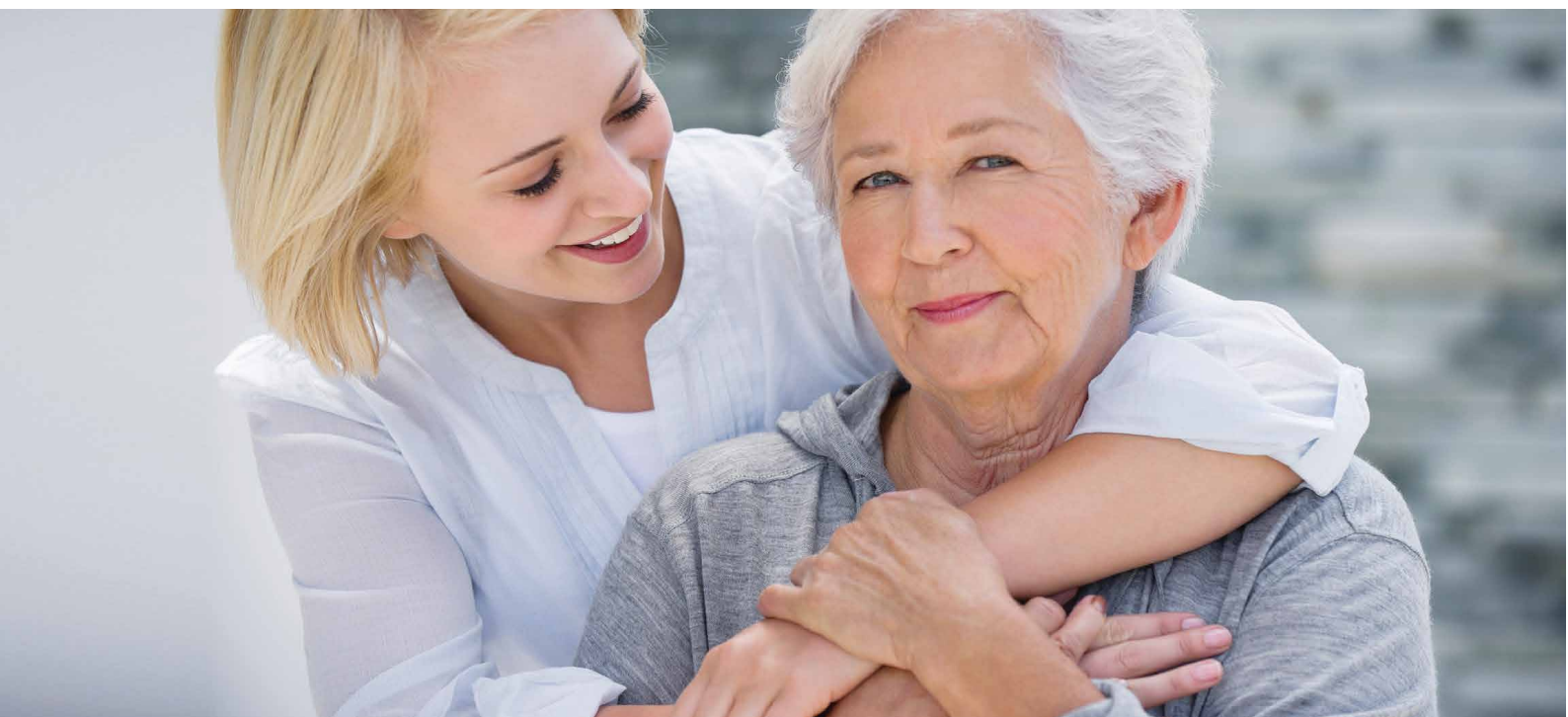
The Transcatheter Mitral Valve repair procedure **does not include a sternotomy**. Therefore your hospital stay following the procedure will likely range from only **one to five days**, depending on your recovery and overall health.

### What you can expect:

- Relief from your symptoms of mitral regurgitation soon after your procedure.  
Most patients will not need special assistance at home following discharge from the hospital, outside of ongoing needs for any unrelated health conditions.
- While in the hospital, you will be closely monitored and your doctor will perform various tests to evaluate your heart function.
- You may be prescribed blood-thinning medications to help reduce the risk of developing a dangerous blood clot after the procedure. Your doctor or nurse will give you instructions about your medications before you leave the hospital.
  - You will be discharged to the care of your cardiologist or family doctor, who will ask you to return for follow-up visits. It is important that you keep all appointments for follow-up care and follow your doctor's instructions.

## ONCE DISCHARGED FROM THE HOSPITAL, IT IS IMPORTANT TO:

- Limit strenuous physical activity (such as jogging or activities that cause breath-holding, grunting, or straining such as lifting heavy objects) for at least 30 days, or longer if your doctor thinks it is necessary
- Carefully follow your doctor's instructions regarding medications you need to take, especially if blood-thinning drugs are prescribed
- Call your doctor if you cannot keep taking your medications because of side effects, such as rash, bleeding, or upset stomach
- Notify your doctor before any medical or dental procedure; you may need to be prescribed antibiotics to avoid potential infection







If you or a loved one would like more information about Transcatheter Mitral Valve repair, please talk to your Doctor or call the Norwest Heart Team on (02) 8882 8552.



\*The information contained in this website is in no way a substitute for professional medical advice. If you have any questions about treatment options, contact your doctor.

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