

# Benefits of Minimally Invasive Mitral Valve Surgery

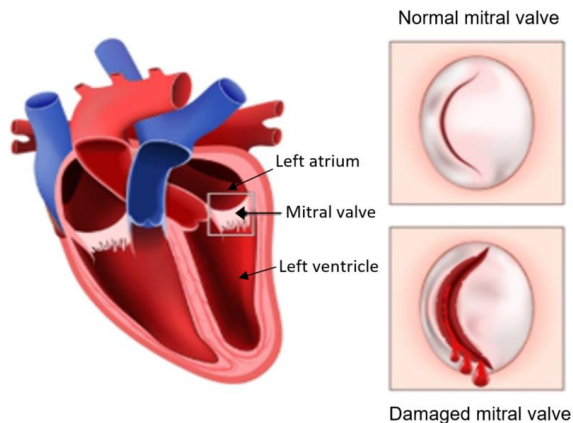
There are many published benefits for undertaking this procedure:

- May avoid the need for cutting through your sternum (breast bone) and lessen the risks of complications such as infection
- The incision is small (6-8 cm) and between the ribs, rather than opening the chest cavity. This reduces recovery time, pain and blood loss
- Minimal scarring that is easier to hide under clothing
- Safe and effective repair that is long lasting
- Lower risk of complications
- Reduced risk of post-operative bleeding and blood transfusions
- Similar outcomes when compared to traditional mitral valve surgery performed via sternotomy
- Shorter time in intensive care and in hospital
- Faster recovery back to your normal activity

## The Mitral Valve

The mitral valve sits on the left side of the heart, between the left atrium and the left ventricle. It has two soft flaps, called leaflets, that work like doors.

With each heartbeat, the valve opens to let blood flow forward, from the left atrium into the left ventricle, then closes to stop blood from flowing backwards.



## Mitral Valve Regurgitation

Mitral valve regurgitation happens when the leaflets do not close tightly. This allows some blood to leak backward into the left atrium.

With regurgitation, the heart has to work harder to eject blood out of the heart and to the body.

Over time, this excess work can cause permanent changes to the heart. The heart can become enlarged, which can increase the risk of abnormal heart rhythms and heart failure.

Surgery is usually recommended to repair or replace the valve. This prevents harmful changes to the heart and stops symptoms from getting worse.

## Mitral Valve Stenosis

In mitral valve stenosis, the leaflets become stiff or narrow and do not open properly. This makes it harder for the blood to flow from the left atrium to the left ventricle.

Over time, the left atrium can become enlarged which can increase the risk of abnormal heart rhythms and heart failure.

Surgery is usually recommended to protect the heart and stop symptoms from getting worse.

## Mitral Valve Surgery

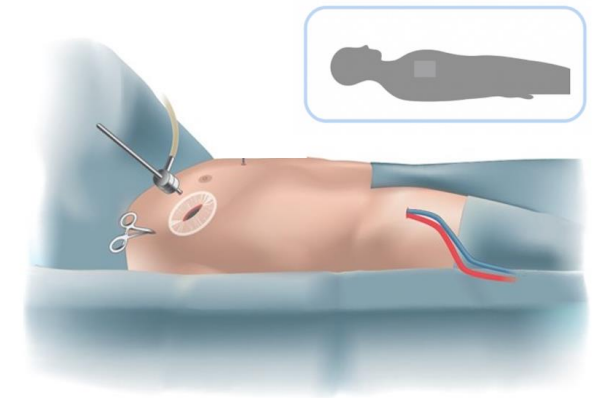
Current guidelines recommend early surgery to repair or replace the mitral valve, completed by a cardiac surgeon at a cardiothoracic surgical centre.

Traditionally, this surgery has been performed via a median sternotomy, a large incision made down the length of the sternum (breast bone).

## Minimally Invasive Surgery

At Auckland Hospital, mitral valve surgery can be performed in some patients using a smaller incision on the right side of the chest. This procedure, known as **minimally invasive mitral valve surgery**, has been shown to be effective and long lasting.

During the procedure, a small cut (called a mini-thoractomy) is made between the ribs. Through this opening, the surgeon can directly see the mitral valve. This view is as good as, and sometimes better than, the view used in traditional open-heart surgery. Through this small cut, the surgeon can repair or replace the mitral valve.



## Is Minimally Invasive Mitral Valve Surgery Right For You?

There are a wide range of patients who may be suitable for a minimally invasive mitral valve surgery, including patients with;

- Mitral valve regurgitation
- Mitral valve stenosis
- Patent foramen ovale (PFO) - An abnormal opening between the upper chambers of the heart

However, not everyone is suitable for this type of surgery.

The surgical and anaesthetic teams look carefully at all test results and medical conditions before deciding if this approach is right for you.