

Mitral Valve Prolapse

What is mitral valve prolapse?

Mitral valve prolapse is an abnormal bulging of the mitral valve when the heart contracts (squeezes).

The heart is divided into 4 chambers. These chambers fill with blood, which is then pumped throughout the body to supply nourishment. Four valves open and close to help this pumping action. This allows the blood to move in a forward direction. The mitral valve is a heart valve made of 2 tissue flaps, called leaflets, which open and close. It is located between the upper chamber (atrium) and lower chamber (ventricle) on the left side of the heart.

When one or both of the leaflets bulge backwards into the atrium, the valve may not always close completely. When it does not close all the way, the valve may sometimes let small amounts of blood flow backward in your heart.

How does it occur?

A defect in the mitral valve can cause the bulging and keep the leaflets from closing well, but often it is not known why or how the prolapse occurs. Many people have mitral valve prolapse, but it is usually mild and causes no problems. It is common in adults with otherwise normal hearts. It also occurs in people with rare, inherited diseases of connective tissue, such as Marfan syndrome or Ehlers-Danlos syndrome. Their skin and other body tissues are abnormally elastic.

What are the symptoms?

Most people have no symptoms. However, sometimes you may have brief periods of a rapid heartbeat or skipped beats (arrhythmia). You may especially notice these changes in your heart rhythm when you are physically active, for example, exercising.

How is it diagnosed?

Often mitral valve prolapse is discovered during a routine physical exam, when your healthcare provider listens to your heart with a stethoscope. When your heart muscle contracts, stretched valve leaflets create a "click" sound that your healthcare provider can hear. If the valve leaks, your provider can hear a murmur. Your provider may

ask you to stand, sit, lie down, or squat during your exam so he or she can better hear the faint sounds.

An echocardiogram, which is an ultrasound of the heart, is the best way to diagnose mitral valve prolapse. The picture made by the sound waves shows the prolapse, any thickening of the valve leaflets, and any leakage of blood through the prolapsed valve. An echocardiogram can show if you have badly thickened and stretched valve leaflets, which may mean you have a higher risk of serious problems.

What is the treatment?

Most people with mitral valve prolapse don't need treatment because the prolapse is not causing any serious problems.

Changes in your heart rhythm may sometimes get quite uncomfortable. Drugs such as beta blockers may be very helpful.

Prolapsed heart valves can become infected more easily than normal valves. Infection can damage the valve and may worsen symptoms. Your provider may prescribe antibiotics for you to take before dental care or surgical procedures to reduce this risk.

How long will the effects last?

You may keep having abnormal heart rhythms. Most of these arrhythmias are of no concern.

Rarely, leakage caused by the prolapse is severe enough to cause more serious heart problems. More blood may leak backward through the valve. This leakage is called mitral regurgitation. It usually gets worse with time and is more common in men with mitral valve prolapse and in people with high blood pressure. The leakage may become bad enough to require heart valve replacement surgery, but this is unusual. If you have mitral valve prolapse with significant mitral regurgitation, you have a slightly higher risk of stroke.

How can I take care of myself?

- With your healthcare provider's supervision, take antibiotics to prevent infections that could spread to the heart valve if you are having any kind of dental work or surgery. This includes having your teeth cleaned or procedures involving the bladder, vagina, or rectum.

If there is any doubt, be sure to ask if you should take antibiotics.

- Tell your dentist and other healthcare providers that you have mitral valve prolapse so you can make sure that you take antibiotics when you need them to prevent infection of the valve.
- If you have high blood pressure, make sure you follow your healthcare provider's treatment plan for it.
- Talk with your provider about how much and what kind of exercise is right for you.
- Call your healthcare provider if your symptoms worsen.

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