

UNDERSTANDING MITRAL VALVE PROLAPSE (MVP)

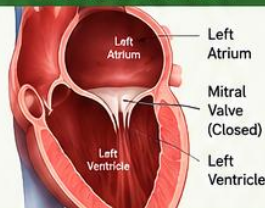
The mitral valve is located between the left atrium and left ventricle. It opens to allow blood to flow forward and closes to prevent leakage backward.



GOOD NEWS!

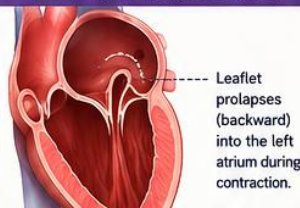
For most people, MVP is mild and causes no symptoms or complications.

NORMAL MITRAL VALVE



Valve closes tightly during contraction so blood flows forward.

MITRAL VALVE PROLAPSE (MVP)



One or both leaflets bulge backward into the left atrium.

MITRAL REGURGITATION (MR)



When the valve does not close completely, blood leaks backward (regurgitation).

HOW COMMON IS MVP?

- Occurs in approximately 2-3% of the population
- Can affect children and adults
- More common in females
- Often discovered incidentally during a physical exam or echo

ECHO LOOK: SEEING MVP ON ULTRASOUND

NORMAL MITRAL VALVE



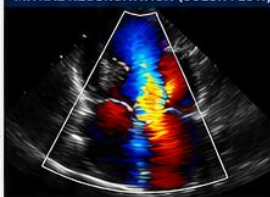
Leaflets close at the same level.

MITRAL VALVE PROLAPSE



Posterior leaflet (P2) prolapsing into the left atrium.

MITRAL REGURGITATION (COLOR FLOW)



Color flow shows blood leaking (backward) into the left atrium.

WHAT CAUSES MVP?



Primary (Classic) MVP

Abnormal connective tissue within the valve. Leaflets become thickened and redundant (myxomatous).



Secondary MVP

Associated with conditions such as:

- Marfan Syndrome
- Loeys-Dietz Syndrome
- Ehlers-Danlos Syndrome
- Rheumatic Heart Disease
- Certain congenital heart defects

SIGNS & SYMPTOMS

Many patients have no symptoms.

When symptoms occur, they may include:

- Palpitations
- Chest discomfort
- Fatigue
- Dizziness
- Shortness of breath
- Exercise intolerance
- Anxiety-like symptoms

Symptoms do not always correlate with the severity of prolapse.



HOW IS MVP DIAGNOSED?



Physical Examination

Your doctor may hear a characteristic mid-systolic click or a murmur caused by mitral regurgitation.



Echocardiogram (Ultrasound)

The most important test. Evaluates valve anatomy, degree of prolapse, severity of leakage, heart chamber size and heart function.



Additional Testing (if needed)

- Electrocardiogram (ECG)
- Holter monitor
- Exercise stress test
- Cardiac MRI (selected cases)

ARE ARRHYTHMIAS COMMON?

Most patients do not develop significant rhythm problems.

Possible arrhythmias include:

- Premature atrial contractions (PACs)
- Premature ventricular contractions (PVCs)
- Supraventricular tachycardia (SVT)
- Rarely, ventricular arrhythmias



Patients with severe mitral regurgitation, significant valve thickening or ventricular dysfunction may require closer monitoring.

WHAT ARE THE POTENTIAL COMPLICATIONS?

Most patients have an excellent prognosis. Potential complications include:

- Progressive mitral regurgitation
- Enlargement of the left atrium
- Enlargement of the left ventricle
- Atrial fibrillation
- Heart failure (rare)
- Infective endocarditis (uncommon)
- Rare ventricular arrhythmias



TREATMENT



No Treatment Needed

Most patients require periodic follow-up, echocardiographic surveillance and healthy lifestyle habits.



Medications

Sometimes used for palpitations, chest discomfort or arrhythmias. Examples include beta-blockers (under physician guidance).



Mitral Valve Surgery

Considered when severe mitral regurgitation develops, symptoms are significant, heart enlargement occurs or ventricular function declines. Valve repair is preferred over replacement when feasible.

SPORTS & EXERCISE



Most children and adults with:

- Mild MVP
 - No significant mitral regurgitation
 - Normal heart size and function
- can participate in sports without restrictions.



Additional evaluation may be needed if there is:

- Severe regurgitation
- Significant arrhythmias
- Syncope
- Ventricular dysfunction



ANTIBIOTICS BEFORE DENTAL PROCEDURES?



Routine preventive antibiotics are **NOT recommended** for isolated MVP according to current guidelines.

Good dental hygiene remains extremely important!



LONG-TERM OUTLOOK

The prognosis for most patients with MVP is excellent. Regular follow-up allows early detection of worsening mitral regurgitation or rhythm abnormalities. Many individuals with MVP live normal, active lives without limitations.



WHEN TO CONTACT YOUR CARDIOLOGIST

Seek medical attention if you develop:

- New or worsening shortness of breath
- Fainting episodes
- Increasing palpitations
- Reduced exercise tolerance
- Chest pain during exertion
- Swelling of the legs



Prepared for Patients and Families by
DR. SHABIB ALHADHERI, MD
Advanced Pediatric Cardiology



1478 W Elliot Rd, Suite 102
Gilbert, AZ 85233



480-855-1339



www.apcardio.com