

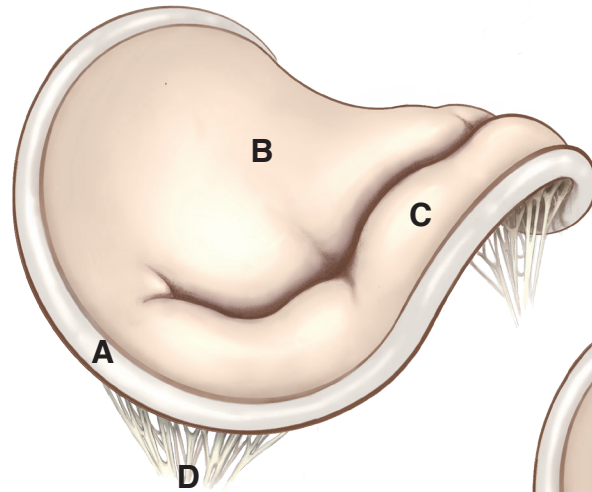
MITRAL VALVE PROLAPSE

Mitral valve prolapse is a heart condition that affects a valve between the left chambers of the heart, known as the atrium (upper chamber) and ventricle (lower chamber). In a healthy heart, the mitral valve keeps blood circulating in the proper direction by opening during a heartbeat, and closing before the next one. In mitral valve prolapse, the leaflets that typically close tightly—preventing the backflow of blood into the left

atrium—no longer align correctly due to stretching or growing larger, and one or both leaflets bulge upwards into the atrium. MVP can also be caused by the stretching or tearing of the chordae tendinae, fibrous cords that hold the leaflets closed between heartbeats. Mitral valve prolapse is often asymptomatic. Patients are typically diagnosed with the use of an echocardiogram; with auscultation (shown at bottom right), a distinctive

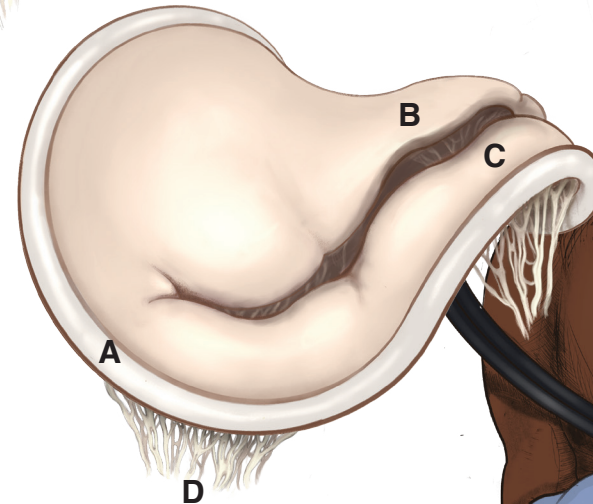
“click” can be heard in some patients with MVP. Black patients in America tend to present with MVP at an average of 15 years earlier than white patients (45 versus 60) and are more likely to be women. Barriers to healthcare and screening tools, particularly lack of access to echocardiograms, may explain underutilization of diagnostic tools and surgical treatment among racial and ethnic minorities in the US.

2-chamber view of prolapse



Closed, healthy mitral valve

Mitral valve positioned within saddle-shaped annulus (A). Anterior leaflet (B); posterior leaflet (C); taut chordae tendinae (D).



Closed with prolapse of anterior leaflet

Mitral valve positioned within saddle-shaped annulus (A). Prolapsed anterior leaflet (B); posterior leaflet (C); slack chordae tendinae (D).

