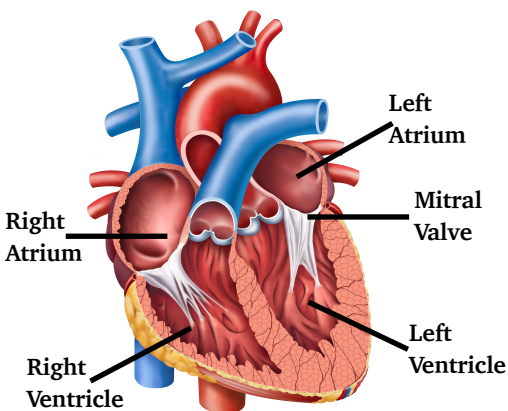


# Myxomatous Mitral Valve Disease

(“Degenerative Valve Disease”, “Mitral Valve Disease”, “Endocardiosis”)

**Myxomatous mitral valve disease (MMVD)** is the most common acquired heart disease diagnosed in dogs. It is particularly common in small breed dogs (< 20 kg). The mitral valve is most commonly affected, but sometimes other valves in the heart (e.g. tricuspid valve on the right side of the heart) can also be affected.



Normally, when the left ventricle (LV) contracts to pump blood to the body, the mitral valve closes to prevent back flow of blood into the left atrium (LA). With MMVD, the mitral valve becomes “leaky” and allows regurgitation of blood backward into the LA. Eventually the leak can worsen, causing enlargement of both the LA and LV. Heart enlargement increases the risk for congestive heart failure (CHF)

**A heart murmur** is often detected as the first sign of MMVD. Heart murmurs are abnormal heart sounds that occur due to abnormal blood flow in the heart (such as regurgitation of blood through a leaky mitral valve). An **echocardiogram** (ultrasound of the heart) is a non-invasive test that allows us to look inside the heart to determine the exact cause of the heart murmur, and also allows us to assess the pumping function of the heart. Other tests that may be indicated for dogs with MMVD:

- ◆ Chest X-ray - to assess overall heart size and the lungs
- ◆ Electrocardiogram (ECG) - to assess electrical activity in the heart, particularly if there is an irregular heart beat (arrhythmia)
- ◆ Blood pressure - to determine if there is excess stress on the heart

**Treatment** is aimed at slowing down progression of this disease and minimizing clinical signs. Dogs with mild MMVD do not need any treatment. For dogs with heart enlargement, Vetmedin® has been shown to delay the time to CHF. Additional medications (diuretics, ACE inhibitors) are needed for dogs with CHF. Some may benefit from a low-sodium diet. Surgical repair of the valve is the standard treatment in humans, however this is costly and challenging in dogs with only a few centers worldwide able to provide this service (more info: [mightyheartsproject.org](http://mightyheartsproject.org))



## QUICK FACTS:

- ♥ Myxomatous mitral valve disease (MMVD) is the most common acquired heart disease in dogs
- ♥ 90% of small-breed dogs > 8 years of age have MMVD
- ♥ MMVD is a progressive condition - some dogs will develop signs of congestive heart failure (CHF), while others may live a normal life
- ♥ Echocardiography is the gold standard for diagnosis and assessment of dogs with MMVD
- ♥ Vetmedin® has been shown to delay the onset of CHF for dogs with heart enlargement due to MMVD
- ♥ Signs of CHF include coughing, difficulty breathing, decreased activity level, fainting, poor appetite