

# Chronic Degenerative Valvular Disease

Chronic degenerative valvular disease is the most common form of heart disease in the canine patient. It is characterized by the slow progressive degeneration of the edges of the heart valves. This creates an imperfect closure of the valve permitting backward flow, or regurgitation, between heart chambers. The most commonly affected valve is the mitral valve which separates the left ventricle, the primary pump to the body, and the left atrium, which receives oxygenated blood from the lungs (See Diagram). With degeneration of the mitral valve there is backflow into the left atrium with every contraction of the ventricle. Over time this results in compensatory enlargement of the ventricle, as it tries to continue to pump enough blood forward to the body. Additionally, the left atrium can enlarge as it stretches to accept the backward flow of blood. As the size of the leak increases, the heart may reach a point in which it can no longer compensate, resulting in fluid backing up from the left atrium into the lungs. This is known as left sided congestive heart failure and produces symptoms of respiratory difficulty and coughing.

Chronic degenerative valve disease typically affects older small breed dogs. A heart murmur caused by the turbulent backward flow of blood is frequently detected on physical exam before clinical signs of congestive heart failure are noted. The gold standard for assessing

the severity and treatment options for affected pets is an evaluation and echocardiogram performed by a board certified veterinary cardiologist such as those of CVCA. We utilize the echocardiogram to determine the severity of the leak and secondary heart enlargement which in turn allows us to make informed decisions on how to best treat your pet. As previously mentioned, this is a chronic progressive disease and we utilize a tiered approach to therapy, which is tailored to each individual patient.

Based on the severity of disease at initial evaluation, multiple medications may be needed, however, some patients with mild degree of backflow and heart enlargement may not require any therapy. Regardless, the valvular degeneration is progressive in nature and requires vigilant monitoring and consistent follow-up in order to optimize treatment and maintain an ideal quality of life for your family member. Our goal is open collaboration with you and your primary care veterinarian in order to prevent, delay, eliminate signs of congestive heart failure and provide optimal quality and quantity of life at home.

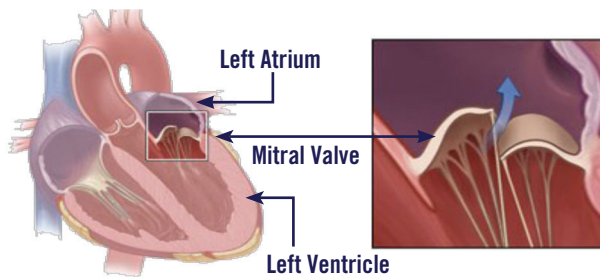
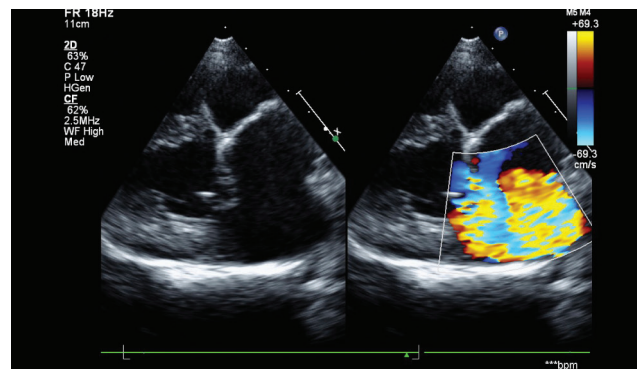


Diagram of the heart depicting close-up of mitral valve regurgitation (blue arrow).



Echocardiogram images taken simultaneously. The left image shows the thickened mitral valve (MV) bowing backwards into the left atrium (LA). The mosaic of color shown on the right is Doppler technology revealing the turbulent regurgitant flow.

