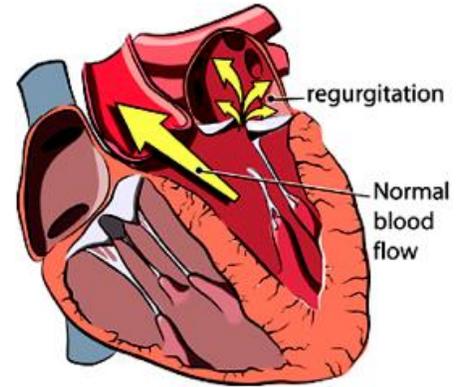


# Chronic Degenerative Valve Disease Stage B1

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**BACKGROUND:** Chronic Degenerative Valve Disease (CDVD) is an acquired heart condition in dogs in which the valves regulating forward blood flow from the small receiving chambers of the heart (atria) into the larger pumping chambers of the heart (ventricles) start to leak. The valves are designed to function as oneway gates. However, when the valves develop degenerative changes they begin to leave gaps in the “gate” and can no longer prevent backflow (regurgitation) from the ventricular chambers into the atrial chambers with each heartbeat (see image). The blood flowing backward across the gap in the valve leaflet does so at a high speed and in a turbulent manner (like water going over rapids) and creates the murmur that we hear on physical exam. Some dogs with this condition only develop gaps across the mitral valve on the left side of the heart, and some dogs develop leaks across multiple heart valves.



Stage B1 CDVD refers to a patient that has developed the condition, but has not yet developed enlargement or “remodeling” to the left side of the heart. Stage B1 is therefore considered an early and mild form of the disease. Dogs can sometimes remain in Stage B1 forever without any clinical signs and without the need for therapy. However, CDVD is a progressive disease process and can worsen over time so continued monitoring is indicated.

If the condition progresses, the left side of the heart will accommodate by becoming enlarged. If this happens, the patient is said to be in Stage B2 CDVD. These dogs still have no notable clinical signs. However, it is at this stage that medical therapy is recommended to try to slow down further progression. CDVD can eventually progress to the stage of left-sided heart failure which is characterized by fluid building up in the lungs. This is when dogs start to have clinical signs including increased breathing rates at rest and coughing. These dogs benefit from multiple medications to maintain their quality and longevity of life.

**MONITORING:** It is recommended for dogs diagnosed with Stage B1 CDVD to have a physical exam and chest x-rays once a year to monitor for progression of the condition. If the heart murmur has changed in intensity, if the screening x-rays indicate enlargement of the heart, or if your pet has developed clinical signs attributable to heart disease, an echocardiogram is indicated to determine if your pet’s condition has progressed so that appropriate therapy and adjustments to their care plan can be made. Clinical signs to watch for at home include exercise intolerance, generalized weakness, collapse, coughing, increased resting respiratory rates and labored breathing. Contact your veterinarian with any concerns.

\*photo taken from <http://www.heart-valve-surgery.com/mitral-valve-regurgitation-symptoms-leaking.php>.