

## What are the stages of MVD?

A

**Your pet's heart is functioning perfectly fine.** However considering is age and breed, it is important to monitor.

STAGE  
B1

**No symptoms or signs of heart disease.** Starting medications at this stage is not recommended.

STAGE  
B2

**Though there are no outward symptoms that you would notice, upon further investigation, your vet may find indication of MVD.**

Studies have shown that starting a specific medication called pimobendan, at this stage can keep your pet symptom-free for an additional 15 months on average.

STAGE  
C

**As MVD progresses, the heart continues to enlarge, leading to symptoms** like difficulty in breathing due to fluid accumulation in lungs (which is called Congestive Heart Failure) and other symptoms like weakness, reduced energy levels. At this stage too, your vet will add additional heart medications which will increase lifespan and improve quality of life of your pet. You will need to give these medications daily for life to control symptoms

STAGE  
D

**At this advanced stage, there is very little your vet can do and many of the medicines may not work too.**

## What can I do to help?

Definitely there are things that you can do to support your vet's effort.

**Monitoring your pet's sleeping or resting respiratory rate (SRR) regularly** at home by counting the number of breaths your pet is taking in one minute. This will help you understand how stable he is. Normal SRR is under 30 breaths per minute. Consistently elevated SRR of over 35 breaths per minute can suggest fluid in the lungs. You may need to contact your vet for further investigations.

**Follow-ups and repeat investigations are required** as MVD is a progressive disease. Hence your commitment is absolutely vital. Repeat heart ultrasounds are recommended every 6-12 months to monitor your pet's heart and disease progression.

**Compliance to medications** is very vital. MVD is a life-long condition and requires daily medication.

**Scan for taking the CHF Symptom Checker Test**



This material is for informational purposes only. It does not replace the advice of a veterinarian. Talk to your vet, and visit [www.savavet.com](http://www.savavet.com) for more information.



**SAVA HEALTHCARE LIMITED**

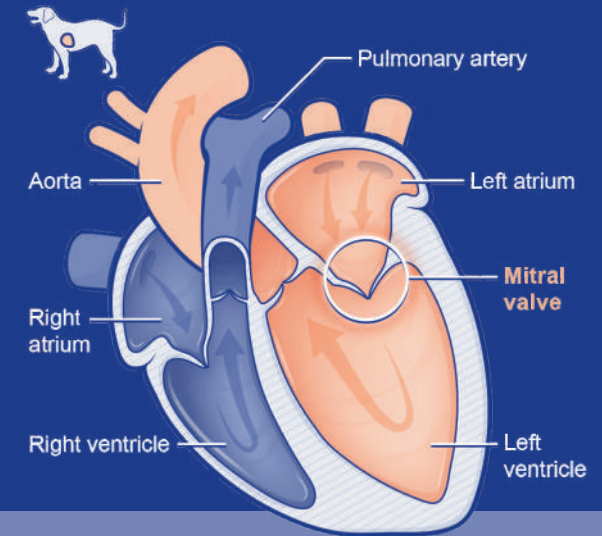
Sava House, Lalwani Plaza, Off New Airport Road, Sakore Nagar, Viman Nagar, Pune-411014, India.

+91 97644 43740

caring@savavet.com



# Mitral Valve Disease (MVD)



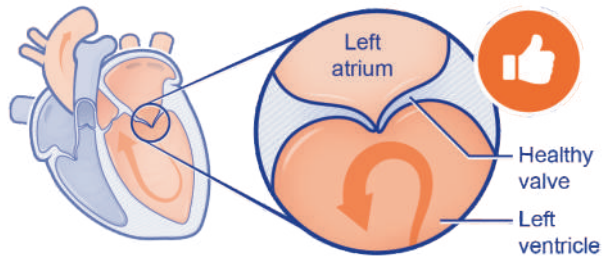
The **mitral valve** is one of the four valves in the heart. It is located between the two left chambers of the heart and separates the left atrium from the left ventricle. Oxygen rich blood flows from the lungs into the left atrium and through the mitral valve, into the left ventricle. **Mitral valve allows the flow of blood from the left atrium into the left ventricle and closes once the blood has entered the left ventricle in order to prevent "backward flow".**

## What is MVD?

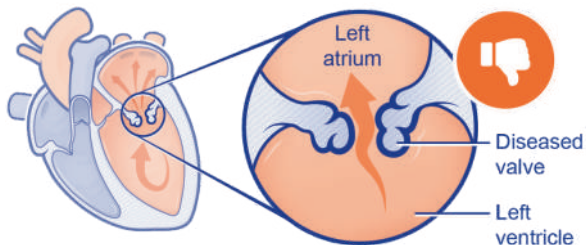
One of the **most commonly diagnosed heart disease** in dogs is Mitral valve disease. It generally affects small breeds with increasing incidence in older dogs. In some breeds however, MVD is diagnosed at younger ages too. MVD can affect larger breeds too, though the incidence is less frequent.

When a dog develops Mitral Valve disease, **it means that the mitral valve has thickened and is unable to close properly**, allowing the blood to flow backwards, that is from the left ventricle into the left atrium. This condition is progressive which means that the amount of blood 'leaking' backwards will increase over time.

*Healthy mitral valve closes properly to prevent backward or flow of blood in the wrong direction*



*A diseased mitral valve does not close properly allowing blood to leak or flow backwards into left atrium*



## Symptoms of MVD

**In early stages of MVD, dogs do not show any symptoms.** That is why these stages are called asymptomatic or preclinical stage. Over time, as the disease progresses, dogs will show symptoms like faster or heavier breathing, nocturnal cough (cough at night time), fatigue or decreased energy levels, and may even collapse.

## How is MVD diagnosed?

**The diagnosis of MVD begins typically because your vet detects a heart murmur with a stethoscope.**

At the very beginning, an **electrocardiogram or ECG** may also be done. An ECG can provide your vet with a variety of information about the dog's heart function such as:

- Is the heart rate normal?
- Is the heart rhythm normal?
- Does the dog's heart size appear to be normal?

**In the asymptomatic or preclinical stage, it is purely by chance that your vet may find a problem in the dog's heart.**

To confirm the exact cause of murmur and in order to find out how advanced the disease is, your vet may get a **heart ultrasound or echocardiography done.** By doing so, your vet may be in a better position to have a detailed assessment of the heart chambers and valves

*Heart Ultrasound procedure*



## Is it important for me to know in which stage of MVD my dog is?

Yes. Your vet will be to act early if the stage of the disease is known. In preclinical or asymptomatic stage of MVD too, your pet will greatly benefit if heart medications are started.