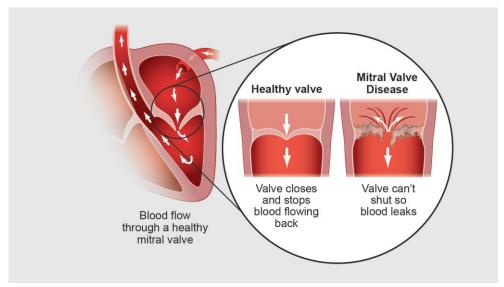
# Mitral Valve Disease in Dog

#### Overview

- Mitral valve disease (MVD) is a heart problem caused by a faulty heart valve.
- It's the most common type of heart disease in dogs and is especially prevalent in small breeds such as the Cavalier King Charles Spaniel.
- MVD typically causes symptoms such as coughing, breathlessness, and low energy, which can range from mild to serious, depending how severely the valve is affected.
- Mitral valve disease can't be cured, but fortunately, most dogs can be well managed with medication and lifestyle changes.
- Contact your vet for an appointment if you are concerned about your dog's heart.

#### What is mitral valve disease?

The 'mitral valve' is one of the four heart valves that control blood flow around the heart. Each time the heart beats, the valves open to allow blood through, then shut to prevent any blood leaking backwards (just like one way doors). Mitral valve disease causes the



mitral valve to become thickened and lumpy, which means it can't shut properly and starts to leak (producing a murmur). Once the mitral valve starts to leak, the heart needs to work much harder to pump blood around the body, and problems start to develop. MVD doesn't always cause symptoms immediately (some dogs can live without symptoms for years), but it's a condition that usually gets worse with time and can eventually lead to heart failure.

### **Symptoms**

Common symptoms of MVD include:

- A heart murmur (detected by your vet)
- Coughing
  - especially after lying down or sleeping
  - o often worse at night
- Low energy and slowing down on walks
- Breathing quicker than usual/ breathlessness/ panting
- Weight loss
- Collapse/fainting

## Diagnosis

If your dog has a murmur and your vet suspects mitral valve disease, it's likely they will need a number of tests to confirm the diagnosis. Tests may include:

- An ultrasound scan to help your vet see inside your dog's heart.
- X-rays to show if your dog's heart has changed size or if there
  is any fluid on the lungs (a common complication of heart
  disease).
- **Blood tests** such as 'ProBNP', to show if the heart muscle is under pressure or struggling to pump blood.
- Blood pressure checks
- An ECG to look at your dog's heart rhythm.

### Stages of Mitral Valve Disease

Thera are four stages of mitral valve disease, ranging from A-C:

- **A.** Your dog is stage A if they are a breed prone to MVD (such as <u>Cavalier King Charles Spaniel</u>), but don't currently have any signs of a problem (no murmur or symptoms).
- **B1.** Your dog is stage B1 if they have a murmur, but no symptoms of a heart problem and no changes on ultrasound scan and/or x-rays.
- **B2.** Your dog is stage B2 if they have changes to the shape of their heart on ultrasound scan and/or x-rays.
- C. Your dog is stage 'C' if they have symptoms of heart failure such as coughing, breathing problems, slowing down on walks and collapse.

#### **Treatment**

There is no cure for MVD but fortunately, most dogs can be managed with the following:

**Monitoring.** If your dog has mild MVD, they are unlikely to need medication to begin with, but they will need to be monitored at home and have regular vet checks. One of the most helpful things you can do at home is to regularly record your dog's resting breathing rate (how many breaths they take/minute when sleeping).

## How to: record a resting breathing rate

**Medication.** If your dog's condition gets worse, or starts to cause symptoms of heart failure (coughing, slowing down on walks etc), they are likely to benefit from heart medications such as:

- Inodilators such as 'pimobendan', to help the heart beat more effectively
- Diuretics such as 'furosemide' and 'spirinolactone', to help remove fluid from the lungs
- ACE inhibitors such as 'benazepril', to make it easier for the heart to pump blood around the body

**Lifestyle.** If your dog has been diagnosed with MVD (or is a breed at risk), it's very important to keep them fit and healthy.

- Make sure they stay slim.
- Take them for regular, short walks to keep them fit and active.
- Try to avoid walks that are much longer or more strenuous than they are used to, this could put their heart under a lot of pressure.

### **Prognosis**

It's impossible for your vet to predict how long your dog will live with MVD because each case is so different. Your dog's life expectancy will very much depend on how serious their symptoms are, how their MVD progresses, and how they respond to medication.

Some dogs with MVD live with no symptoms for many years (sometimes even their whole lives), some require medication and respond extremely well, and some, develop much more serious MVD that doesn't respond to medication. Sadly, in serious cases that don't respond to medication, MVD can shorten life expectancy, even to a few days or weeks.

## When to contact your vet

Book an appointment with your vet if you have noticed any of the symptoms listed above or you're worried about your dog's heart. If your dog has mitral valve disease and they are deteriorating, contact your vet for an appointment.

#### **EMERGENCY**

If your dog is struggling to breathe, contact your vet immediately for an emergency appointment.

## Breeds prone and screening

MVD can affect any dog but it's most common in small-medium breeds such as the:

- Cavalier King Charles Spaniel
- Dachshund

- Papillon
- Poodle
- Chihuahua

Fortunately, there are heart-screening programs available for most at-risk breeds. If you are considering getting a dog, make sure to do your research, and check whether heart screening is necessary for the breed you are interested in.

#### Cost

Treatment for MVD can be very expensive because it's a condition that can need life-long monitoring and treatment. It's important to speak openly to your vet about your finances, the cost of treatment, as well as what you think is right for your dog. There is often more than one treatment option, so if one doesn't work for you and your dog then your vet may be able to offer another.

Consider <u>insuring your dog</u> as soon as you get them, before any signs of illness start. This will ensure you have all the support you need to care for them.

## Am I eligible for PDSA veterinary treatment?

## FAQ's

Can my dog have a mitral valve replacement? No. Unfortunately, it's not currently possible to replace faulty valves in dogs. However, some vets at specialist hospitals are researching how we might be able to repair diseased mitral valves in dogs.

Can I cure my dog's MVD? No. Sadly there is no cure for MVD but thanks to modern medicine, many dogs with MVD can lead happy lives, especially if their condition is caught early and responds well to medication.

**Do I have to treat MVD?** Not all dogs with MVD need medication straight away, but if your dog has symptoms, they will eventually start to suffer if without the right treatment. If your dog's quality of life is poor and you think treatment isn't working, or isn't possible,

you may need to discuss the difficult decision of putting your dog to sleep to prevent any future suffering.

Can I stop my dog getting MVD? Although there is no way of stopping a dog getting MVD, there are some breeds that are more prone to it and it's important you consider which dog is right for you before picking a puppy. It's also a good idea to have regular check-ups with your vet throughout your dog's life (for example at annual vaccination appointments), which will allow them to pick up early signs of problems such as a heart murmur.

Will my dog die from MVD? MVD doesn't always cause problems immediately (some dogs can live without symptoms for years), but it's a condition that usually gets worse with time and eventually can lead to heart failure. If you have a dog with MVD, the most important thing is to monitor them for changes and contact your vet as soon as possible if you have concerns - the sooner your dog gets treatment the better.

Published: Aug 2020