



## **Heart disease in dogs**

There are several different diseases, which make the heart a less efficient pump. The most common of these can be divided into two groups:

1. Disease of the heart valves, causing them to be “leaky”  
Most commonly this is age related wear-and-tear causing distortion of the valves, but a small number of animals are born with misshapen, leaky valves
2. Disease of the heart muscle, causing it to beat less effectively.

Generally smaller dogs are more prone to valve problems and larger dogs are more prone to problems with the heart muscle.

Heart disease can be present in your pet without you being aware of it because the body is able to compensate for minor deficiencies. However, your vet may be able to pick up heart disease at this early stage if he or she detects abnormal heart sounds, heart rate or heart rhythm when examining your pet.

When the body can no longer compensate for a diseased heart, congestive heart failure (CHF) develops.

### **Signs of heart failure**

If your pet is showing any of the following symptoms of heart failure, consult your vet without delay:

- Lethargy
- Reluctance to exercise
- Fast breathing or increased effort breathing
- Depression and lack of appetite
- Coughing (especially at night)
- Swollen abdomen

### **Diagnosis**

In many cases it will be possible for your vet to diagnose heart failure after a careful examination of your pet. However, further tests may be required to confirm this diagnosis, and also to determine exactly what type of heart disease your pet is suffering from. Examples of further tests include:

- Chest X-rays to evaluate the size and shape of the heart, and also to examine the lungs for evidence of fluid accumulation
- ECG recordings to record the heart's rhythm and electrical activity
- Collection and examination of fluid from a swollen abdomen
- Ultrasound scans of the heart

Occasionally your vet will recommend that your pet is referred to a specialist veterinary hospital for a more specialised ultrasound examination of his or her heart than can be performed at the surgery.

## **Treatment**

Although heart disease cannot be cured, your vet can prescribe medication that can ease the symptoms of heart failure and reduce the rate of progression of the condition. Treatment should significantly improve your pet's quality of life and in many cases will also increase life expectancy. In particular, you should notice that your pet eats more and is more active after starting medication.

A new study has now shown that starting a medication called Pimobendan (Vetmedin) can also delay the time it takes for your dog to develop congestive heart failure. If your dog has a heart murmur and an ultrasound scan confirms that there are changes to the size of the heart chambers then it is beneficial to start this medication.

## **Medicines used to treat heart failure**

The most important medication to use with congestive heart failure is a diuretic. This will help reduce the fluid on the lungs and make it easier for your dog to breathe. A new diuretic called Torasemide (Upcard) has just been licensed for dogs, this is given once a day. As this is a very new drug many of our patients are taking Furosemide. If your dog is stable on furosemide there is no need to change their medication but new cases may be started on Upcard.

All diuretics will make your dog urinate and drink more. Initially a higher dose may be used to help clear any fluid and then as your dog stabilises the dose can be dropped to the lowest dose which helps keep their lungs clear. Frusemide can be given by injection into the vein if your dog is presented as an emergency and then continued as a tablet or liquid at home. It is also possible to add in a different diuretic if more help is needed to reduce the fluid. Spironolactone is another diuretic which is not as strong as furosemide or Torasemide but is also thought to help reduce remodelling in the diseased heart.

Other drugs used in heart failure are:

- Pimobendan – this drug helps the heart muscle beat more effectively and increases the amount of blood the heart can pump around the body. It also opens up blood vessels carrying blood to and from the heart, which reduces the work your dog's heart has to do to pump blood around its body.

- ACE-inhibitors – these drugs reduce the salt and water retention which occurs with congestive heart failure

Once your pet has been diagnosed with a heart condition requiring medication, treatment will be lifelong. The medication will not cure the heart problem; it can only provide control. There are many different types of heart medication, all acting in different ways to support a struggling heart. This means that your pet may be prescribed several different types of tablet to take at the same time.

Do not run out of tablets – contact the surgery to arrange a repeat prescription if you are running low on medication. Your vet will ask to re-examine your pet shortly after starting treatment. Your vet may decide to alter the type or dose of medication depending on the results of this check-up. Once your pet is stable on treatment, your vet will need to check him or her every 3-6 months to ensure that the treatment is still suitable and there has not been any deterioration in your pet's condition. This is a legal requirement, in line with the dispensing of all prescription medicines.

If your pet shows any deterioration such as breathing problems, increased coughing, or reluctance to eat, arrange for your vet to check him or her over as soon as possible.

### **Other measures**

- If your pet is overweight, this will be placing additional strain on his or her heart. Gradual weight loss is recommended for these animals. Your vet will be able to advise you if your pet is overweight, and provide advice regarding sensible weight loss. Free nurse weight clinics can also help support you.
- Regular, gentle exercise is best for animals with heart problems. Short lead walks several times daily, avoiding the hottest part of the day during the summer months. If your dog tires or becomes distressed whilst out walking allow him or her to rest before continuing, and consult your vet if problems persist.
- Other infections or illnesses may affect a pet with a heart condition particularly severely. Always consult your vet sooner rather than later if you are concerned regarding your pet's health.