

## How is heart disease treated?

The treatment options for heart disease very much depend on the diagnosis.

The vast majority of **acquired heart diseases** are managed with medication. These will have effects on the heart to improve the quality of the heartbeat and reduce pressures that the heart has to work against.

This field of medicine is improving all the time, and leading to longer survival times with a good quality of life for patients with chronic heart disease.

Some **congenital heart defects** such as Patent Ductus Arteriosus (PDA) can be cured completely with 'keyhole' heart surgery offered by some specialist centres. In a similar way to humans the heart defect can be closed by passing a catheter through a small incision in the groin and into the heart. Other congenital heart defects such as a condition called pulmonary stenosis can be improved by another specialist procedure called a balloon valvuloplasty.

Other conditions such as heart rhythm abnormalities can be controlled with a pacemaker. This is an electrical device which is placed surgically under the skin and linked by cables to the heart. It has its effect by controlling and co-ordinating the contractions of the heart as it beats.



ECG Examination performed on a dog

## Summary

Dogs and cats can suffer from a wide range of heart diseases which vary in severity. An accurate diagnosis will help identify what treatment is needed, and what the long term outlook may be.

Not all heart diseases need to be treated, but the vast majority of those cases requiring treatment are managed on long term medication.

There are a few specific heart defects which can be corrected with surgery, often offered by specialist cardiologists.



XLVets Small Animal member veterinary practices work together to share experience, knowledge and ideas to ensure the highest levels of quality and care for their client's pets. XLVet member practices provide a compassionate and caring service for all pets and at the same time offer comprehensive and up-to-date treatment in all fields of veterinary medicine and surgery.

# HEART DISEASE IN DOGS AND CATS



It is estimated that heart problems can affect up to 10% of dogs and cats in the UK. Some heart diseases may be present when the animal is born, however the majority develop in adulthood. This leaflet will help you understand what can happen if your pet has a heart problem, how the condition can be diagnosed and how it can be treated.

## Spotting the signs

**Heart disease** is any condition of the heart or great blood vessels which affects the way the heart works and prevents oxygen being transported normally around the body.

**Congestive heart failure** occurs when the diseased heart begins to lose its ability to pump enough blood to meet the needs of the body.

### What to look out for:

- Coughing, breathing difficulty or breathlessness
- Reduced energy levels and inability to exercise
- Cyanosis (where the gums become blue in colour),
- Collapse or hind limb weakness
- Ascites(fluid build -up in the abdomen)

NB: It is important to remember that some heart diseases are mild and cause **no symptoms** whatsoever in the animals lifetime.



## Some common types of acquired heart disease:

**Degenerative Mitral Valve Disease (DMVD)** is by far the most common acquired heart disease in dogs. This can affect any breed but is more commonly seen in the smaller dogs. The problem arises when the Mitral valve in the heart degenerates and changes shape over time. This valve becomes leaky and causes a heart murmur which can be heard when the heart beats. This sound may be detected by your vet at a routine examination and can be the first indication of a problem.



**Hypertrophic Cardiomyopathy (HCM)** is the most common acquired form of heart disease in cats. With this disease the heart muscle becomes thickened and prevents the heart relaxing, filling and pumping properly.

**Dilated Cardiomyopathy (DCM)**, can be seen in both dogs and cats, although is far more common in the dog. This is another disease of the heart muscle which results in thinning of the heart wall, and weakened pumping ability. DCM can be responsible for collapse and sudden death, especially in certain breeds such as the Dobermann Pinscher.

Congenital Heart Diseases are seen less often, but may include malformations of valves or a failure of the closure of a blood vessel after birth.

## How is heart disease diagnosed?

A combination of tests are usually required to diagnose heart disease, these include:

- **Electrocardiography (ECG)**



ECG from a dog with an arrhythmia (irregular heart beats)

- **Radiography (X rays)**



Chest X- ray showing heart enlargement

- **Blood Pressure Monitoring**
- **Blood Tests**
- **Echocardiography (a form of ultrasound scanning)**



Echocardiogram from a cat in heart failure due to DCM