

Cardiology investigations at the Chestnut Veterinary Group

We offer a comprehensive range of facilities looking into potential heart problems in your dogs or cats including:

Echocardiography and doppler echocardiography

Electrocardiography (ECG)

Holter electrocardiography (ECG)

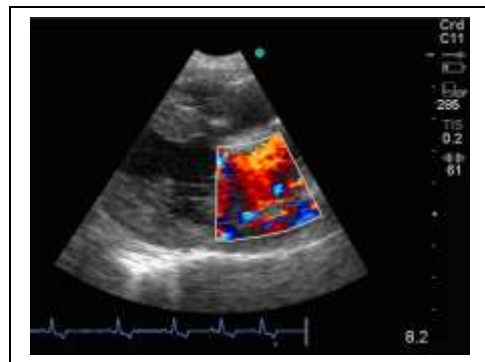
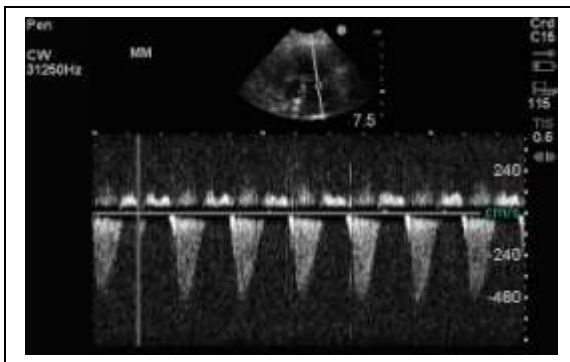
Doppler blood pressure measurement

Radiography

Echocardiography

What is an Echocardiogram?

Echocardiography is a painless, non-invasive test that uses sound waves like the sonar on a submarine to create 2-D pictures of your pet's heart. The test can give your vet information about the size, shape and motion of your pet's heart, and provide invaluable data to assess how well his/her heart's chambers and valves are working. In addition, a type of echocardiography called Doppler ultrasound uses a special microphone to measure the speed and direction of blood flow in the heart and can be used to assess heart valve function. Echo can detect possible blood clots inside the heart and fluid build up in the pericardium (the sac around the heart).



What does the procedure involve?

Your pet will need to lie on an examination table where he/she will be gently held by a veterinary nurse. A patch of fur will need to be clipped on either side of the chest, along with placement of some gel on your pet's skin, so as to reduce interference of the image produced by fur. Your vet will hold a transducer (a device similar to a computer mouse) against your pet's chest which transmits sound waves to a computer that will display the 2-D image on a screen. The test takes approximately 60 minutes to complete. Various measurements will then be performed to assess the function of your pet's heart and provide an objective baseline for comparison in the future should any condition progress.

For most patients, this test can be performed conscious – it is unusual for sedation to be required. However, we do ask you to starve your pet prior to the test (nothing to eat after 9pm the night before, but free access to water) in case some sedation is required if your pet gets stressed in any way. Unless by prior agreement, we would ring you during the day should any sedation be required, hence we do ask you to be contactable by phone at all times during the day.



When will I get the results?

Due to the number of calculations that need to be performed after collection of the data, it may not be possible to give you all the results at the time of collection of your pet. Your vet will ring you usually within forty-eight hours after the procedure to discuss the findings in more detail. If you wish, an appointment can be made (included in the cost of the scan) for you to see the scan pictures and discuss the findings in more detail.

Electrocardiography

What is an ECG?

The heart is a muscular organ that beats rhythmically to pump blood around the body. An ECG measures this electrical activity of the heart and prints this as a paper record from which various calculations can be performed. Your vet may have suggested an ECG following listening to your pet's heart and hearing an abnormal beat, or it may be indicated in association with an echocardiogram to get further information about your pet's heart's function. Furthermore, an ECG may be required to assess your pet's response to various medications. In addition, an abnormal rhythm may result from toxins/conditions occurring elsewhere in the body and hence further tests such as an abdominal scan may be indicated in the investigation of your pet's condition.

How is an ECG performed?

An ECG is performed when the patient is resting – your pet will usually need to lie down whilst being gently held by a veterinary nurse. Sticky pads are placed on all four feet from which wires transmit information to a computer. The test is completely painless and non-invasive and sedation is not required. Your pet will only have to stay still for a couple of minutes; it is the follow up analysis which is time-consuming.

It is important to note that an ECG may appear normal even in the presence of significant heart disease and so for a full assessment of the heart, other tests may also be needed.



Holter electrocardiography (ECG)

Electrical abnormalities are sometimes intermittent. In some cases it may be necessary for your pet to have a 24-hour ECG performed to look for any intermittent abnormalities. This will involve your pet wearing a small back-pack with 3 sticky pads attached to their skin. A small bandage will keep this pack in place followed by a fitted vest. This is a completely painless and non-invasive test. It is important that your pet goes about his/her normal activities over a 24 hour period at home however he/she **must not** go into water or get wet. A follow up appointment will be made for your vet to remove the equipment and the electrical recording will be sent for analysis to a local hospital. Results should be received within a week and your vet will be able to arrange a consultation with you either over the telephone or in person to discuss the results.

Doppler blood pressure measurement

Blood pressure measurement is important in animals, just as it is in people. It is a simple procedure requiring just a small patch of fur to be clipped on one of your pet's paws, & a small probe placed here. An inflatable cuff is placed higher up on the leg &, just as with humans, a blood pressure measurement can be then be taken. Depending on your pet's temperament this may be taken during a routine appointment, or we may ask you to leave your pet with us for a few hours to acclimatise him/herself with us & reduce effects of stress on readings. This procedure is performed conscious and is non-invasive & painless.

Radiology

Sometimes radiographs are also required to investigate your pet's condition. This is particularly in the case of assessing the lungs which can be affected by various heart conditions and substantially change medical requirements. Radiographs usually require some form of sedation or anaesthesia to keep your pet still enough for an image to be taken safely. We are very aware that many of the patients requiring cardiology investigations are poorly or frail. We take great care to formulate sedation and anaesthesia protocols that minimise the risk to the utmost of our abilities. It is important to note that there is always a risk to sedation or anaesthesia but if your vet suggests radiography, it will be for an important reason that will help him/her to choose the most appropriate treatment and medication that your pet might need. Your vet will be happy to discuss any investigation and treatment options with you.

A guide to costs for the above procedures is listed below:

Echocardiogram: £290.00

This is estimated for a 1 hour scan with follow-up analysis, a concurrent ECG, and a follow up consultation or telephone call to discuss the results.

Electrocardiogram: £100.00

This incorporates the taking and analysis of results of an ECG, with a follow up consultation or telephone call to discuss the results.

Holter Electrocardiogram: £200.00

This includes the set-up and hire of the holter ECG equipment, analysis of data at a local hospital, and follow up consultation or telephone call to discuss the results. It does **not** include the protective suit required to be worn over the ECG pack as this varies with the size of the patient (additional £17-£20)

Doppler blood pressure measurement: £40.00

Radiography: This usually requires sedation or anaesthesia, and varies quite substantially on the number of views required and the size of your pet. Your vet will be happy to work out a personalised estimate should radiography be indicated in the investigation of your pet's condition.