

Information for Clients – Echocardiography

What is an echocardiogram?

This is an ultrasound of the heart. This is a non-invasive procedure that allows us to 'look inside' the heart to assess the internal structures: the chambers, valves, muscle walls and vessels.

Why is the procedure being performed?

There are a number of reasons we might wish to perform an ultrasound of your pet's heart. Often, it is to determine the significance of a murmur that has been detected on clinical examination. Some murmurs are 'physiological' (no risk to the patient), whereas others occur as a result of a structural change in the heart (and so are 'pathological'). In dogs, this is most often a leaky valve, which can lead to secondary stretching of the heart. It is possible to give medications to delay the onset to clinical signs, if there is a degree of stretch visible on the scan. Cats, on the other hand, typically show changes of the heart muscle wall, or a 'stiff' heart. The degree of change does not necessarily well correlate to the intensity of the murmur detected, so a scan may even be recommended for cats without murmurs, but with changes in the heart rhythm, or breathing changes. Alternatively, we may be investigating your pet's cough, breathing changes, lethargy or exercise intolerance. Echocardiography is frequently performed alongside other diagnostic tests.

What does the procedure involve?

Patients need to be clipped, on both sides of their chest (and dogs, a small patch under their breastbone). They are gently held on their side by a nurse, on a cushioned table with specially-designed holes to allow access to the chest wall, for the vet to scan. Once all necessary views and measurements from one side are taken, we move the patient to lay on their opposite side. The scan can take anything from 20-30 minutes (depending on the view required and patient cooperation).

Does my animal need to be sedated for the procedure?

Although we try to perform the procedure conscious in all patients, it is sometimes necessary to give them mild sedation. The level of sedation required is just sufficient to relax the patient and therefore very mild. Usually, this requires the placement of an intravenous cannula, so your animal may also have a shaved patch on the leg(s) for this. Since there is usually a concern for possible cardiac disease, the choice of drugs and doses used are adjusted for this potential risk. *Since some patients do require sedation, we ask that they are starved on the morning of the procedure. Please allow food until 10pm the night before, then remove. Do not withhold water.*

Why are other tests necessary as well?

It is often necessary to perform other tests alongside echocardiography, in order to make an overall assessment of the cardiovascular and/or respiratory systems. These may include blood pressure measurement, ECG recording, and x-rays of the chest. The requirement for these tests will be discussed with you by the vet either prior to the appointment, or after the scan (depending on the findings). Blood tests may also be necessary to either determine the patient's overall health – in particular, kidney function if it is necessary to start diuretics or if blood pressure is high – and/or to measure cardiac 'biomarkers' which can also indicate stress or stretch on the heart.

When will I get the results of the scan?

The vet performing the scan will endeavour to report results to you the same day. Sometimes, however, your pet may be discharged from hospital for the vet to discuss the results with you at a later point that day, or that week. If a second opinion or specialist input is required, a complete report may not be provided until 1-2 weeks after the scan.

If you have any questions please contact your regular vet.