



CPD!

I now offer in-practice ultrasound training, tailored to your or your teams' requirements. [See the website for more details.](#)

Photos from latest echo course in Portugal!



In The News

I am starting a **cardiology certificate** in May! I'm really looking forward to learning something new (hopefully). This means I will also be contacting you after a heart scan for follow-up information so I can collect cases for the case reports. I also now include a blood pressure measurement for most heart scans for no additional cost.

I have also scanned a variety of congenital heart conditions (tricuspid dysplasia, ventricular septal defect, PDA, aortic stenosis) over the past year and **I am now happy to scan congenital heart conditions.** These cases are tricky to scan due to a combination of small patient size, a wiggly patient and potentially complex findings. If I cannot confirm a diagnosis from the scan, I can send the images and videos externally for a second opinion.

The key skill in echocardiology is **interpretation** – creating lots of numbers is not difficult but having numbers that are accurate and interpreting them in

context of the patient is vital – a rounded heart with poor contractility is normal in spaniels and should not be mistaken for DCM (my Springer Spaniel had a fractional shortening of 13%, normal for dogs is over 25%!).

We are at the stage in veterinary cardiology that we can measure lots of things on an echo but often it is unclear how it affects prognosis or treatment options. For example, we know that left ventricular outflow tract obstruction is common in cats, but there is no consensus as to whether it is always associated with structural change, or is an early marker of HCM or can be normal in some cats. There is also a lack of consensus between Specialist Cardiologists on stages for intervention for many conditions, acquired and congenital, and treatments to use, which doesn't help us GP vets!

Holiday season is nearly here, and I have a couple of holidays booked during which I will have no internet or mobile access (digital detox cold turkey!). Therefore, there are dates in the coming months when I will be not available for visits and also dates when I will not be able to reply to emails, messages or phone calls as I will have no internet access. The best place to check my availability is to look on the booking page on the website (<https://www.vetartis.co.uk/booking/>).

- **April 15th to 29th with the period of out of contact from Tuesday 16th April to Friday 26th April, inclusive.**
- **Friday 31st May to 21st June with the period out of contact from Friday 31st May to Thursday 20th June inclusive.**

Remember, I cannot confirm a booking without receiving a booking form and those that are received will take priority.



Sedation – why?

I am often asked about sedation prior to scanning. Sedation is often required to facilitate a safe and stress-free procedure for patient and handlers, but I don't demand it and especially for heart scans I'm happy to try without. Panting, tense abdominal muscles and patient movement can significantly impact the quality of the study and ability to visualise certain structures. For an anxious patient, a little light sedation is good for their welfare – reducing stress and anxiety, keeping them calm and helping them forget any bad experiences.

Oral sedatives (such as **gabapentin** for cats or **trazodone** for dogs) given at home prior to the procedure can help for severely anxious or fractious patients. Additional injectable sedatives may still be needed. Give with the minimum amount of food possible (particularly for abdominal scans). For fractious cats, gabapentin is best given the night before and morning of the procedure (at least 2 hours prior). Gabapentin is rarely contraindicated but lower doses should be used in cats with renal disease. Cats who have been administered gabapentin should be kept inside and not allowed to roam for 12 hours after administration.

Decisions about which sedatives to use should always be guided by careful clinical evaluation of each individual patient and knowledge of any potential adverse effects and drug interactions. It is for these reasons that the choice of sedative remains with the case vet in the practice as they know the pet and its history and will be continuing the pet care when I've left the building.

You can find my suggested sedative protocols for heart scans on the website, in the 'Partner Practice Area' menu.

I've completed **Fear Free training** – please ask me if you'd like to find out more.



Renal diets – can they be started too soon?

Why not restrict the phosphorus levels of every CKD cat or have every older cat on a renal diet? Hyperphosphataemia is associated with the progression of kidney disease and decreased survival times in cats with CKD and phosphate restricted renal diets significantly increase survival time in cats with CKD – a couple of excellent studies showed this a couple of decades ago.

But there are downsides to renal diets: they are more expensive for owners to purchase; the cat may not accept them; cats on renal diets lose muscle mass (even if eating enough calories) which is negative prognostically; and **cats on renal diets are at higher risk of developing hypercalcaemia** (and so kidney stones, bladder stones and worsening CKD, speeding progression). Ionized hypercalcemia develops in 14.3% of CKD cats within 6 months of transition to a phosphate-restricted diet!

So how can the FGF-23 test be useful? FGF-23 identifies mineral disruption and phosphorus overload (CKD-MBD) earlier than total serum phosphorus and is a valuable tool in the early identification of CKD before phosphorus rises. The FGF-23 test can be used in cats with IRIS CKD Stages 1 and 2 to determine the need for targeted therapy, such as dietary management to reduce phosphate intake or phosphate binders. It is extremely valuable for identification of MBD in early-stage kidney disease, but it should not be used to diagnose CKD.

Use the IDEXX FGF-23 test in early stage CKD (where increasing creatinine but within range still, or SDMA persistently >14 µm/dL, or persistent proteinuria) to determine the need for phosphorus restriction i.e. renal diet. We still have more to learn about this test and testing for PTH in CKD.

You can read more about this new test [here on the IRIS website](#), [here on the ISFM page](#) (a link to the IDEXX summary paper on the test), and [here a discussion paper on renal diets](#), stretching to 28 pages!