



McMASTER & HEAP VETERINARY PRACTICE

A RARE CASE OF ENDOCARDITIS IN A DOG

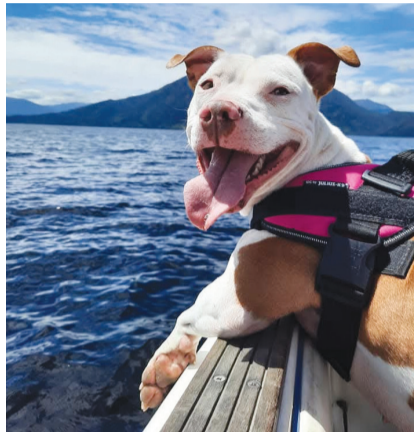
I first met Lacey, a 9 year old Staffy late one Friday afternoon, for a chronic longstanding history of inappetence, a shifting leg lameness that was progressively getting worse, foreleg swelling and a fever. She was such a sweet wee thing, who just looked tired, exhausted and sore. She had recently been treated at another clinic, having had dental work performed, lump removals and radiographs that demonstrated elbow arthritis. She had been scripted anti inflammatory medications for her lameness and suspected osteoarthritis, but was clinically deteriorating. Lacey was normally a fit and active dog with a voracious appetite, so the owner couldn't understand the rapid decline. When I first met Lacey she was actually unable to walk or stand up. She would only eat if food was taken to her, and she was becoming incontinent, due to her inability to stand up and toilet herself. It was all very frightening for both owner and patient.



On examination Lacey had a fever, high blood pressure and a very fast heart rate. She was thin and musculoskeletally weak. She also weirdly had many craterous ulcers on her tongue and gums. Her front legs had pitting oedema. She had no gastrointestinal signs, mentation was normal and she wasn't neurological.

I immediately pulled bloods from Lacey, popped her on IV fluids and tried to get my head around what was going on. Her blood tests were all over the show, with many abnormalities, the most significant being extremely elevated WBCs (white blood cells) indicating possible sepsis. The origin of sepsis unclear. She was also anemic, had low platelets and an elevated CRP (marker of inflammation). Surprisingly her abdominal organs were pretty normal.

Dr Richard Lucy came in on a Saturday to perform ultrasonography and echo cardiology. This was so appreciated as Lacey was fast deteriorating. Richard found a very thickened mitral valve with vegetative lesions throughout. Her spleen had numerous 2-3cm masses dotted throughout. A tentative diagnosis of **Bacterial Endocarditis with splenic bacterial embolism and splenitis** was thought, which fitted with her clinical



picture. An FNA sample of the spleen was taken for cytology to rule out splenic lymphoma. The cytology supported the above diagnosis, which basically translates to an infection on her heart valves, a rare disease that in 36 years of being a veterinarian, I've only witnessed once before.

Lacey was immediately started on high doses of **triple** antibiotic therapy (intravenously at first, moving onto oral medications) anti inflammatory/ pain medications and gut support supplements. I'm so pleased to add we are now 8 weeks into treatment and slowly but surely Lacey is getting back to her old self. She is walking normally, attempting to play and resume normal behaviours, her appetite is back, the fevers are gone and her abnormal blood tests are returning to normal reference ranges. What a relief for us all.

Bacterial Endocarditis is uncommon but a serious disease, where bacteria colonise on damaged heart valves (commonly the mitral or aortic valves). The likely bacteria involved are Staplococci, Streptococci or E Coli. Risk factors can be recent dental procedures, skin disease, urinary tract infections, IV catheter placement, immunosuppression and others. Common clinical signs are lethargy, fevers, inappetence and weight loss. You may also see lameness and a newly diagnosed heart murmur. Blood cultures diagnose the disease along with ECHO findings. Because I saw Lacey with a weekend looming, I elected to start antibiotics without performing blood cultures. Lacey is looking at 8-12 weeks of antibiotic therapy. She has another ECHO exam in a few weeks to see how her heart and mitral valves lesions are doing. So far so good though.

This case wasn't easy but highlights the beauty of having a range of diagnostic tools at your fingertips which can help yield a diagnosis. It also emphasises solid team work and collegial support and despite a weekend approaching, the vets at MMH were willing to stay late, come in on weekends, in order to help get a diagnosis and treatment plan in place for Lacey.

Dr Michele McMaster, April 2026

