



PATIENT PRESENTING CLINICAL SIGNS

Goliath Martin

History: vomiting, diarrhea, was anorexic, lethargy, hacking cough. Hx of pancreatitis flare-ups, MCT grade 2, enlarged prostate. R/O neoplasia. On metronidazole, clavamox, sucralfate.

SPECIES

Abnormal PE/Chem/CBC/UA Results: WBC 46.6 with neuts 28.6, monos 2.37, eos 14.3; BUN40.2, creat 1.6 (azotemia resolved.)

Canine

BREED

Labrador Retriever

SEX

Intact male

AGE

9 years

WEIGHT

89 lbs

ULTRASONOGRAPHIC EXAMINATION OF THE HEART

The echocardiogram in this patient demonstrated normal **left atrial** size based on 3 different LA measurement methods. Chamber volumes and echogenicity were normal. The cranial and caudal **mitral** valve leaflets presented vegetative thickening consistent with endocardiosis. Doppler indicated measurable insufficiency. The **left ventricle** presented thicknesses with linear contour and was not dilated nor restricted. The **myocardium** presented normal echogenicity without subjective evidence of significant fibrotic or ischemic disease. **Contractility** of the ventricular walls was adequate and in normal range for this patient evidenced by the fractional shortening measurement and subjective evaluation of the different regions of the myocardium. The **left ventricular outflow** tract demonstrated normal laminar flow and subjective structural integrity. The **right atrium** and auricle revealed normal size, structure and content. No evidence of masses was noted or chamber overload. Minor **tricuspid** insufficiency was noted. The **right ventricle** was of normal size (1/3 diameter of LV), chordae structure, myocardial echogenicity and thickness. **Pulmonic** tract assessment revealed normal valve structure, laminar flow, and diameter (approx. 1:1 pa/ao ratio). No visible **pericardial** or free pleura fluid was noted. No echographically detectable evidence of infiltrative disease was visible. The cranial **mediastinum** and **pericardial regions** were free of masses in the visible window.

INTERPRETED BY

Eric Lindquist, DMV
DABVP, Cert. IVUSS

IMAGING PERFORMED BY

Diane McFadden, RVT

HOSPITAL NAME

Newton VH

INVOICE

Dr. Barron

DATE

3/10/22

CANINE	MR	TR	LA/AO	LA/AO	FS	EF	EPSS
CARDIAC PARAMETERS	VMAX (m/s)	VMAX (m/s)	(Boon method)	(Heart Base; Swe)	(%)	(%)	(cm)
NORMAL PARAMETER	4.5-5.5	<2.7	1.3	<1.6	28-40	40-100	<0.6
PATIENT		2.44	1.25	1.3	31	58	0.6
CANINE	HR	AV	PV	BODY WEIGHT	LA	LVIDd	LVIDs
CARDIAC PARAMETERS	(BPM)	VMAX (m/s)	MAX (m/s)		2D short axis Base view (cm)	Avg; 2D and m-mode short axis (cm)	Avg; 2D and m-mode short axis (cm)
NORMAL PARAMETER	50-100	0.7-1.7	0.7-1.6				
PATIENT		1.5		89lbs	3.4	4.59	



PATIENT **ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN**

Goliath Martin

Urinary System

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Canine

The **urinary bladder**, trigone, and pelvic urethra presented normal thicknesses and normal tone. The ureters were not visible which is normal. No uroliths or sediment were visualized and anechoic urine was present. No evidence of inflammatory or neoplastic changes was noted. Ureteral papillae were normal.

BREED

Labrador Retriever

The **prostate** was uniformly enlarged with lobar swelling appeared to impinge upon the urethra and mildly deviate the descending colon. The prostatic tissue was hyperechoic containing focal areas of decreased echogenicity. These changes are suggestive of either chronic inflammatory episodes, benign cystic pathology or both. Underlying neoplasia cannot be completely ruled-out but is lower on the differential list. This presentation is most consistent with benign prostatic hyperplasia with possible active prostatitis. Neutering or off-label Finasteride (Propecia) (0.1-0.5 mg/kg Sid) treatment is indicated +/- FNA or prostatic wash cytology and culture. The prostate measured 3.0 cm. The right testicle revealed a 2.5 cm isoechoic mass. The left testicle revealed a mixed hypoechoic mass that measured 2.5 cm.

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The **kidneys** revealed largely normal size and structure, corticomedullary definition and ratio (cortex 1/3 of medulla) were essentially maintained with some age-related loss of curvilinear patterns regarding the capsule and C/M junction. The cortices presented largely uniform texture with some increased echogenicity expected for this age patient. Medullary structure differed distinctly from that of the cortex and no evidence of pelvic dilation was present. The right kidney measured 8.53 cm. The left kidney measured 8.37 cm. The left kidney revealed pericapsular and fluid accumulation. This is likely deriving from the lymph node +/- splenic pathology.

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Adrenal Glands

Both **adrenal glands** were visualized and recognized as having normal shape, size, position and echogenicity for this breed. The phrenic vasculature, glandular echogenicity and detail were unremarkable. Capsule, cortex, and medullary definition were normal for this age patient. The right adrenal gland measured 2.86 x 1.52 cm at the cranial pole and 1.09 cm at the caudal pole. The left adrenal gland measured 3.64 x 0.61 cm at the caudal pole and 0.56 cm at the cranial pole.

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Spleen

The **spleen** was mildly enlarged with subtle, micronodular changes and was folded upon itself caudally.

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Liver

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The **liver** images from right and left intercostal as well as subcostal views revealed subjectively normal liver size, contour, and structure. Some age-related parenchymal remodeling was noted but likely not clinically significant at this time. Vascular and biliary tracts were of normal volume and no evidence of congestion was noted. The gallbladder presented some dependent debris with essentially normal contour. The cystic and common bile ducts were normal. No overt evidence of active inflammatory, infiltrative or regenerative pathology was noted but should be paired with current or past LE elevations regarding any clinical significance to this presentation. The hepatic lymph nodes were unremarkable.



PATIENT *Gastrointestinal*

Goliath Martin Examination of the **gastrointestinal tract** revealed a stomach and intestine free of stasis, of normal wall thickness, acceptable curvilinear mural detail, and peristaltic activity. Small and large intestine demonstrated normal luminal chyme and stool consistency respectively. No obstructive or overt infiltrative disease was noted.

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Pancreas

The base and limbs of the **pancreas** were observed to be largely isoechoic to surrounding omental fat. Pancreatic duct and capsular contour were acceptably normal and parenchyma respected normal curvilinear patterns. No overt evidence of active inflammatory or neoplastic disease was noted.

SEX

Intact male

Free Abdomen

Sublumbar lymph nodes masses were noted and measured up to 4.34 cm. The iliac lymph nodes were enlarged and the largest measured 8.05 x 5.13 cm.

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ULTRASONOGRAPHIC FINDINGS

Minor tricuspid insufficiency. No evidence of cardiac disease.

Sublumbar iliac lymphadenopathy. Suggestive for aggressive neoplasia. Round cell neoplasia or metastatic disease from elsewhere.

Bilateral testicular masses, may be unrelated to the iliac and sublumbar lymphadenopathy.

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INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Ultrasound-guided FNA of the sublumbar lymph nodes is recommended. Guarded prognosis depending upon response to chemotherapy. Examination of the caudal limbs and anal glands are recommended.

Very guarded prognosis depending on responsiveness to chemotherapy. Depending on where the mast cell tumor was the iliac and sublumbar lymph nodes may be metastatic.

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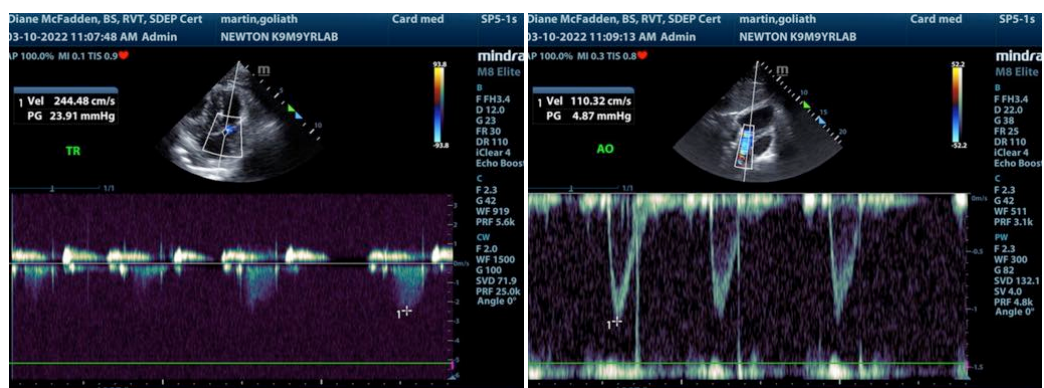
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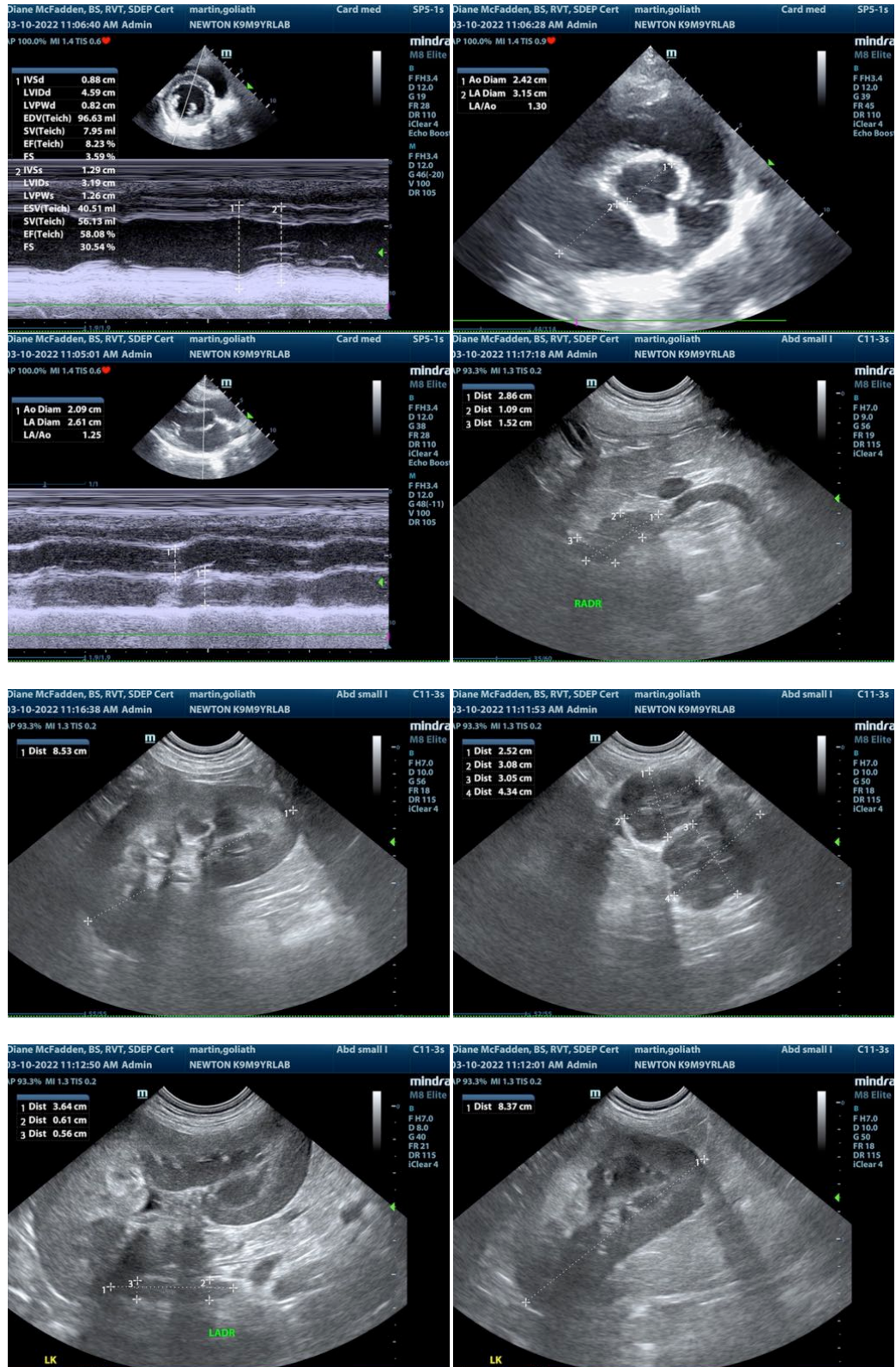
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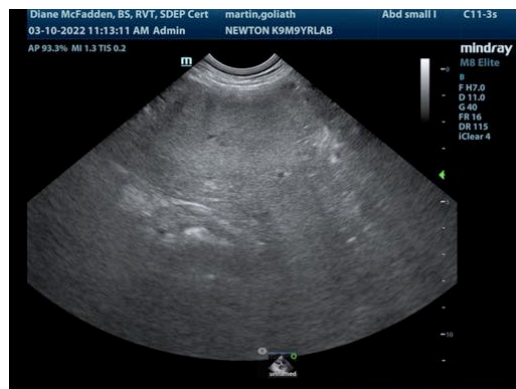
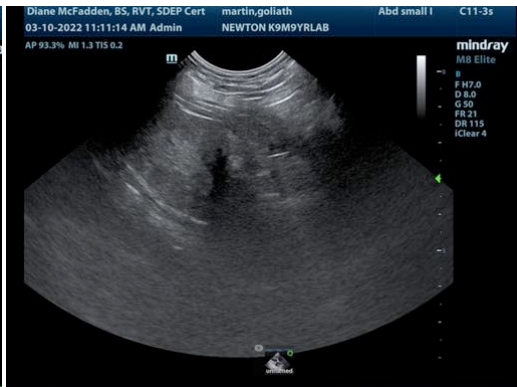
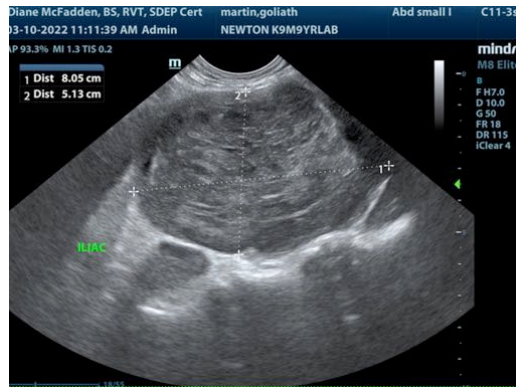
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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

Thank you for this referral. If the clinical or image interpretation does not parallel your findings or if I can be of any further assistance please contact me.

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