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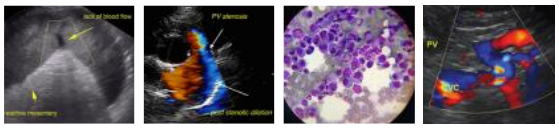


ANIMAL SOUNDS NW
MOBILE VETERINARY ULTRASOUND
IMAGING PERFORMED BY
AnimalSoundsNW.com 541-357-9423

PATIENT

Kimber Lundy

SPECIES

Feline

BREED

DSH

SEX

FS

AGE

11 years

WEIGHT

10 lbs.

INTERPRETED BY

R. McKenzie Daniel, DVM, DABVP (Canine and Feline)

IMAGING PERFORMED BY

Jenna Walsh, CVT

HOSPITAL NAME

Countryside AC

REFERRING VET

Dr. Cox

INVOICE

15342

DATE

11/2/22

PRESENTING CLINICAL SIGNS

Nodular, firm but cystic mass on the lateral aspect of the left hind leg, rapidly growing - r/o: vaccine induced sarcoma, cyst, abscess, foreign body Heart murmur Dental disease Heart Rate and Respiratory Rates 138 Pulse, 42 Respiration

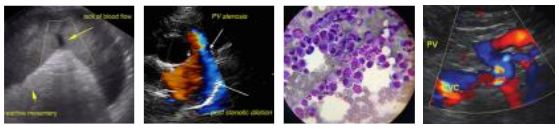
ULTRASONOGRAPHIC EXAMINATION OF THE HEART & HIND LIMB

FELINE CARDIAC PARAMETERS	**BODY WEIGHT** (kg)	**HR** (BPM)	**IVSd** (cm)	**LVIDd** (cm)	**LVWd** (cm)	**FS** (%)	**EF** (%)
NORMAL PARAMETER	------	150-240	0.3-0.6	1.0-2.1	0.25-0.6	35-67	80-100
PATIENT		162	0.46	1.56	0.45	62.5	93
FELINE CARDIAC PARAMETERS	**LA/AO** (Boon)	**LA/AO HEART BASE** (Sisson)	**LA** 2D 4-chamber long axis AS to FW (Sisson) (cm)		**LVOT VEL.** (m/s)	**RVOT VEL.** (m/s)	**IVRT** (m/)
NORMAL PARAMETER	<1.5	0.88-1.79	0.7-1.7		<1.6	<1.3	40-60
PATIENT	1.1	1.0	1.2		1.0	0.82	NM

Adapted from June Boon,Veterinary Echocardiography,1998
Sisson D et al. JVIM 1991; 5: 232, Jacobs et al. Am J Vet Res 1985; 46:1705

Cardiac Presentation

The echocardiogram in this patient demonstrated normal **left atrial** size based on 3 separate LA measurements. The cranial and caudal **mitral** valve leaflets presented normal linear structure and kinetics. Minor MR was present on Doppler. The **left ventricle** presented normal 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 and angles of the myocardium. The **left ventricular outflow** tract demonstrated normal laminar flow and subjective structural integrity. Normal measured LVOT velocity with tract aortic insufficiency on Doppler. The **right atrium** and auricle revealed normal size, structure and content. No evidence of masses was noted or chamber overload. **Tricuspid** valvular assessment demonstrated adequate linear morphology and kinetics. 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



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(approx.1:1 pa/ao ratio). Normal measured RVOT velocity was present. No visible **pericardial** or free pleura fluid was noted or extra cardiac pathology in the visible planes. The cranial **mediastinum and pericardial regions** were free of masses in the visible window.

Other

Sonographic assessment of the mass in the left hind limb revealed ill-defined nonhomogeneous to mixed echogenic subcutaneous mass which appeared to extend to the level of the surrounding fascial planes with moderate to high potential for regional tissue invasion. The mass measured approximately 5.0-5.5 cm in diameter. The mass contained cystic components within the mass parenchyma containing primarily anechoic fluid with very mild echogenic changes, which may suggest minor fluid cellularity. The mass appeared to extend to the level of the regional bone with the possibility of mild associated periosteal reaction. The cystic components within the mass may indicate areas of cysts, necrosis / abscess, hemorrhage, or other.

ULTRASONOGRAPHIC FINDINGS

- Normal cardiac structure and function
- Minor MR
- Tract aortic insufficiency
- Ill-defined mildly irregular mixed echogenic subcutaneous mass with intra mass cystic component - potential regional fascial invasion and potential attachment to regional periosteum

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

No evidence of structural or functional cardiomyopathy. Minor MR and trace aortic insufficiency were present yet not likely audible. No evidence of additional clinical issues such as significant valvular insufficiency, stenotic disease, left or right heart chamber enlargement, or LV systolic dysfunction were present. In the absence of volume changes, i.e., dehydration or anemia, a benign physiological flow murmur is suspected. Regardless, the hemodynamic effects of the murmur appear to be minimal given the lack of cardiac chamber enlargement. No indication for cardiac medications. No anesthetic contraindications. Conservative monitoring of the murmur is recommended with recheck echocardiogram in 6 months, sooner if murmur intensity increases or if clinical signs suggestive of heart disease arise.

Although pending cytology is required for further assessment, neoplastic criteria for the subcutaneous mass is considered likely. CT evaluation of the mass is warranted. However, limb amputation is likely the best option assuming no evidence of metastatic disease elsewhere in the body. Thoracic radiographs are recommended if not done, as well as abdominal ultrasound to rule out concurrent pathology if amputation is being considered (likely ideal).

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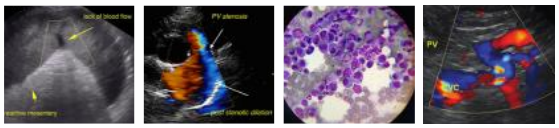

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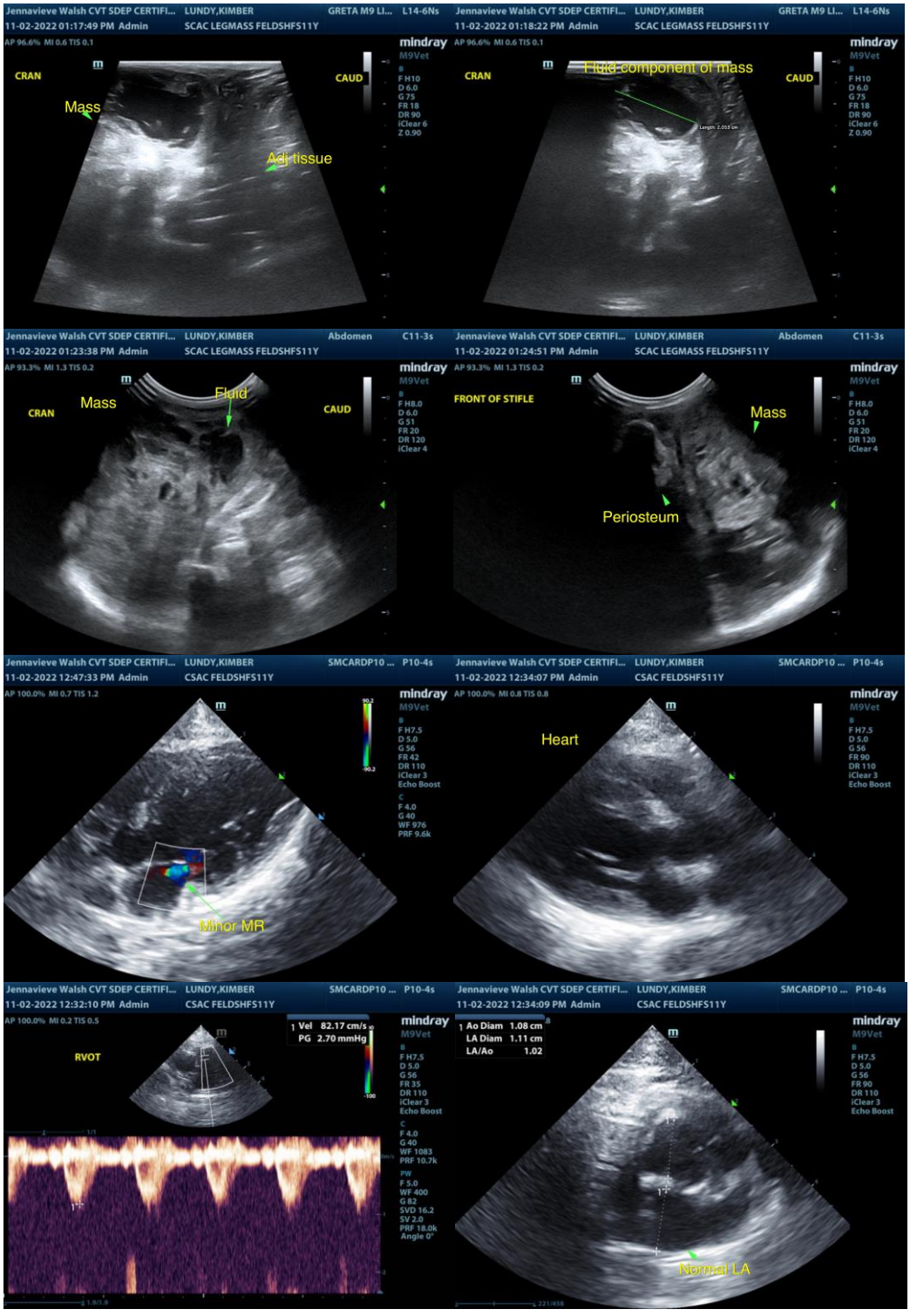

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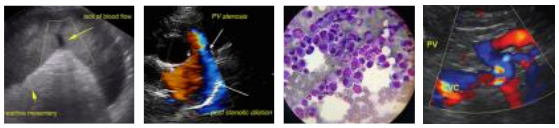

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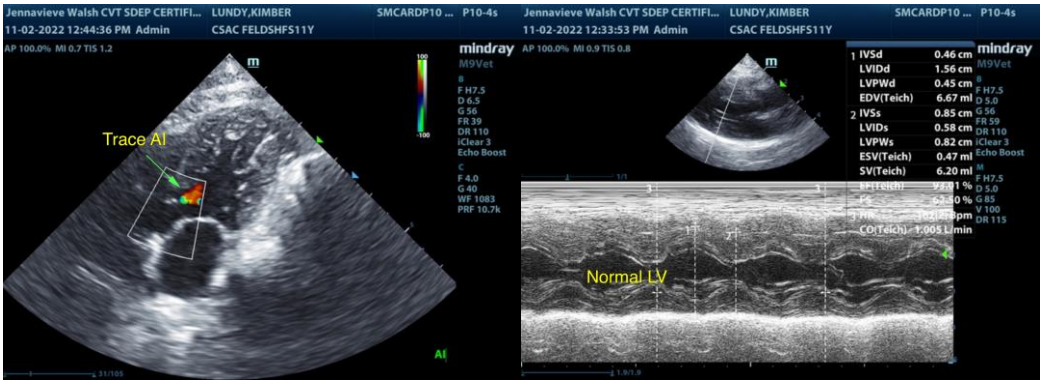

The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.

R. McKenzie Daniel, DVM, DABVP (Canine / Feline Practice)
info@SonoPath.com