

PATIENT PRESENTING CLINICAL SIGNS

Maggie Leflein

History: coughing, murmur 3/6. on hydrocodone
 Abnormal PE/Chem/CBC/UA Results: BUN 40, crea 1, USPG 1.033

SPECIES

Canine

ULTRASONOGRAPHIC EXAMINATION OF THE HEART

BREED

Cockapoo

The echocardiogram in this patient demonstrated enlarged **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. Prolapse of the anterior mitral valve leaflet was noted. Doppler indicated measurable insufficiency. 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.

SEX

Spayed female

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. **Tricuspid** valvular assessment demonstrated adequate linear morphology. 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). **Pericardial** effusion was noted in this patient, yet not to the level of tamponade effect and would suggest a left atrial tear, yet not overtly visible. The cranial **mediastinum and pericardial regions** were free of masses in the visible window. Tachycardia was evident. The hepatic veins were dilated.

AGE

16 years

WEIGHT

18.2 lbs

INTERPRETED BY

Eric Lindquist, DMV
 DABVP, Cert. IVUSS

IMAGING PERFORMED BY

Diane McFadden, RVT

HOSPITAL NAME

American AH

REFERRING VET

Dr. Arculli

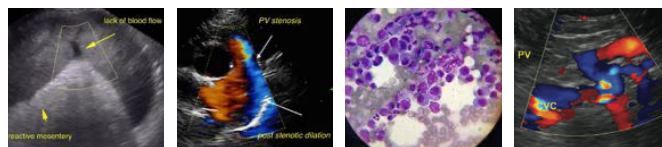
INVOICE

42525

DATE

2/2/23

CANINE	MR	TR	LA/AO	LA/AO	FS	EF	EPSS
CARDIAC PARAMETERS	VMAX (m/s)	VMAX (m/s)	(Boon method)	(Heart Base)	(%)	(%)	(cm)
NORMAL PARAMETER	4.5-5.5	<2.7	1.3	<1.6	28-40	40-100	<0.6
PATIENT	5.96	4.0	2.32	2.36	41	72	0.1
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	BELOW	BELOW	BELOW	BELOW
PATIENT	155	1.61		18.2 lbs	4.05	3.95	



PATIENT ULTRASONOGRAPHIC FINDINGS

Maggie Leflein Advanced B2- C1 valvular disease with concurrent pulmonary hypertension.

SPECIES Pericardial effusion suggestive for potential small atrial tear.

Canine Hepatic vein dilation and pulmonary hypertension would suggest emerging right-sided failure.

BREED INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Cockapoo I recommend Quadrotherapy in this patient with Pimobendan at 0.3 mg/kg b.i.d., ace inhibitor at 0.5 mg/kg s.i.d. progressing to b.i.d., Spironolactone with 1-2 mg/kg b.i.d. and Lasix at 2-3 mg/kg b.i.d. I

SEX recommend to monitor BUN, creatinine, urine specific gravity and sleeping respiratory rate. This is an atypical advanced Stage B2 or C1 valvular disease. A recheck sonogram is recommended in 2 weeks if the patient is able to be stabilized. This patient is at risk for sudden death. Cage rest and eventual leash walking is recommended over the next 3-5 days depending upon clinical signs. Hycodan or similar can also be utilized to suppress cough. Antibiotic coverage may be appropriate depending upon radiographic findings. Eventual Sildenafil may be necessary in this patient depending on response to therapy. Treat more aggressively in this patient due to the clinical signs and precarious nature of the cardiac presentation with tachycardia despite the lack of we lung presence that would suggest congestive heart failure. This patient does not fall into the typical stage B2 category given the pericardial effusion and significant tachycardia and cough. Functionally I feel that the patient is more of a C1 patient, but falls in a gray area in the consensus statement.

Spayed female

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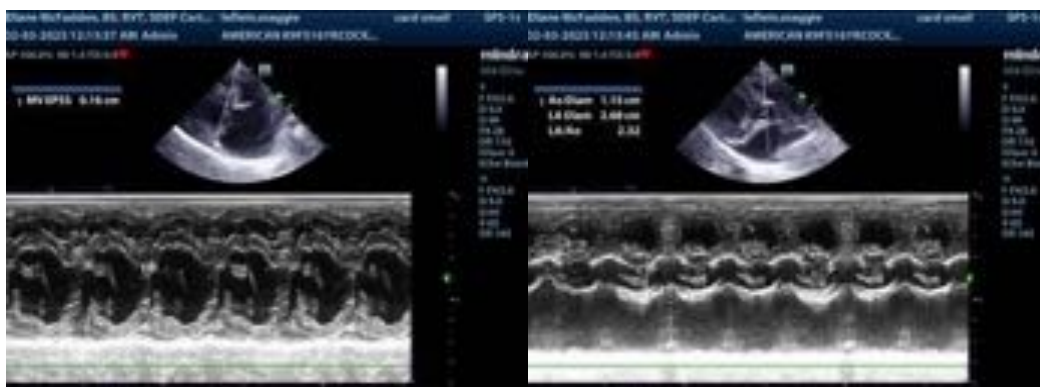
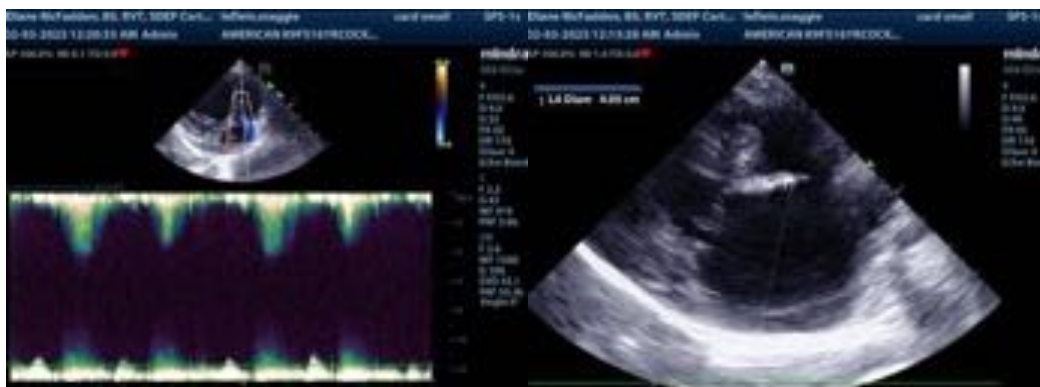
Dr. Arculli

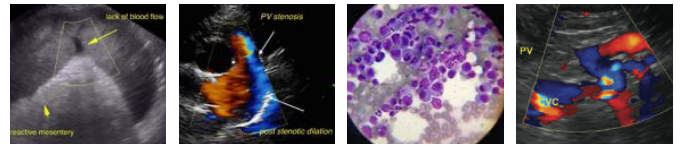
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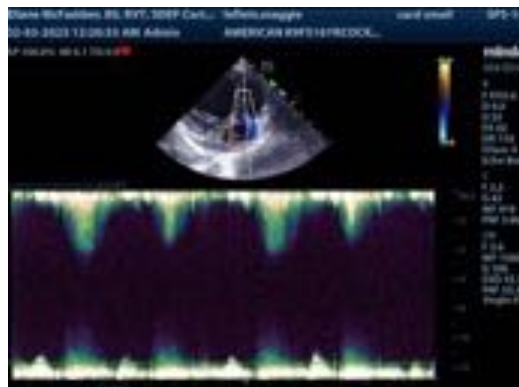
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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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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