



PATIENT

PRESENTING CLINICAL SIGNS

Mittens Close

History: Brief History: Presented evening of 3/18 for decrease appetite x 1 week, vomiting x 24 hours and lethargy. Had diarrhea out of the litter box today. No known dietary indiscretion. Hx of hyperthyroid and elevated liver enzymes. No history of azotemia. Recheck thyorid levels 6 months ago were normal. Hospitalized on IV fluids, antibiotics, GI supportive medications

SPECIES

Feline

BREED

DSH

SEX

Spayed Female

Abnormal PE/Chem/CBC/UA Results: Lab/trends: CBC: Hct 30.1 WBC 6.99 neut 5.54 Plts 371 Chem 17: Creat 7.0 BUN 71 Phos 11.4 EPOC: Creat 8.28 BUN 67 HCT 26 iCa 1.54 Na 135 K 3.4 Cl 108 T4 to IDEXX UA: USG 1.014 pH 7.0 protein 100+ Gluc 50+ WBC 6/HPF, RBC >50/HPF Rods , suspect cocci. No crystals
 Urine culture to idexx **ULTRASONOGRAPHIC FINDINGS** • Hypoechoic pancreas with minor duct dilation
 • Minor increased cortical echogenicity noted in the kidneys **INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS:** Degenerative changes in the kidneys appeared to be very minor and definitely not end stage, therefore, acute insult suspected. BP systolic 160 PE = QDR / sedate on gabapentin, Grade 2/6 left parasternal systolic heart murmur. RR/RE wnl. ABD non-tense, Thin BCS with mild generalized muscle atrophy. Ate well at 7 am when offered food.

AGE

13 Years

ULTRASONOGRAPHIC EXAMINATION OF THE HEART

WEIGHT

3.43 kg

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	--	NM	0.58	1.53	0.43	31	63
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	1.4	1.31	1.4	>1.15	.77	NM	

INTERPRETED BY

Eric Lindquist, DMV
DABVP, Cert. IVUSS

IMAGING PERFORMED BY

Kalenius

HOSPITAL NAME

Wilvet Salem

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

REFERRING VET

Dr. Emily Kalenius,
DVM

INVOICE

14369

DATE

3/18/22

Cardiac Presentation

The echocardiogram in this patient demonstrated normal **left atrial** size based on 3 separate LA measurements. Mitral insufficiency noted, not clinically significant. 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. 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



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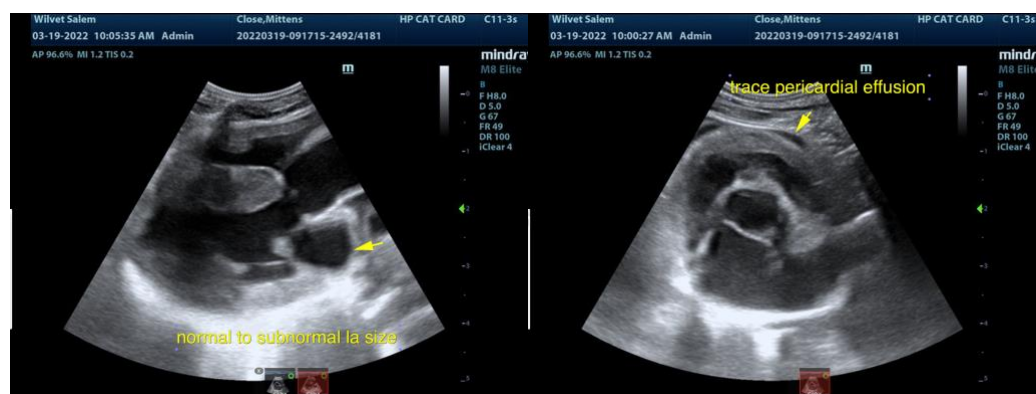
diameter of LV), chordae structure, myocardial echogenicity and thickness. **Pulmonic** tract assessment revealed normal valve structure, laminar flow, and diameter (approx.1:1 pa/ao ratio). A trace amount of pericardial effusion was noted, likely owing to inflammation, noncardiogenic causes. Comet tail/shower curtain lung pattern noted.

ULTRASONOGRAPHIC FINDINGS

- Normal echocardiogram with mitral insufficiency
- Comet tail/shower curtain lung pattern
- Noncardiogenic pulmonary edema with trace cardiogenic pericardial effusion

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Primary respiratory protocol recommended in this patient. Assessment for causes of a systemic inflammation or underlying neoplasia recommended. No evidence of volume overload, in fact, the left atrial size is normal to subnormal in size.





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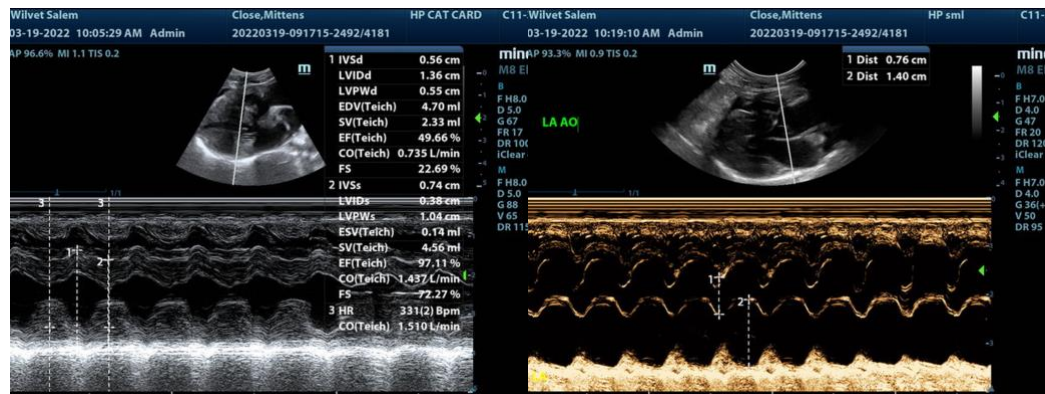
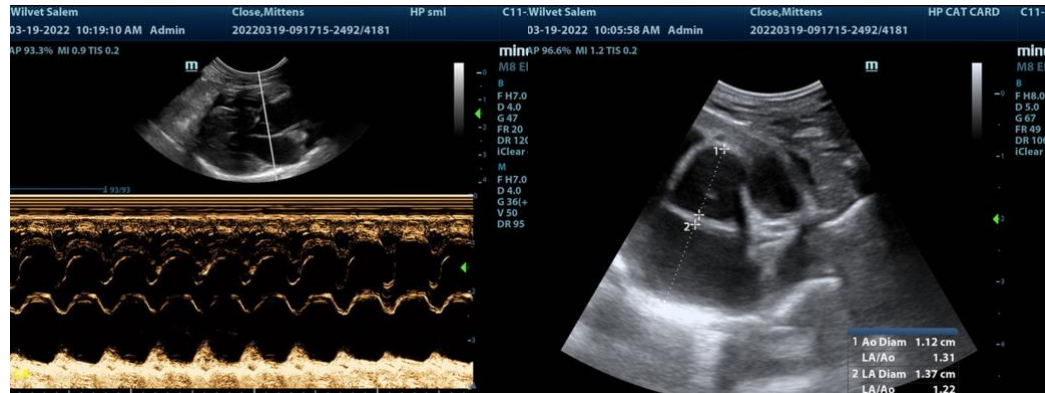
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The information and recommendations provided are based on the images presented by the referring veterinarian. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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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