



PATIENT PRESENTING CLINICAL SIGNS

Kobe Scala

History: Patient presented over the weekend for ocular/nasal discharge, tachypnea, dyspnea, weight loss, and decreased appetite. 90mls of fluid removed with thoracocentesis.

SPECIES

Abnormal PE/Chem/CBC/UA Results: CXR: Severe bilateral pleural effusion, alveolar pattern, possible cardiomegaly, pulmonary arterial and venous congestion. R/O cardiomyopathy vs. pyothorax vs. chylothorax vs. neoplasia *Patient has been on Lasix since Saturday.

Feline

BREED ULTRASONOGRAPHIC EXAMINATION OF THE HEART

Domestic Shorthair

The **left atrium** was enlarged in size. **Mitral** valve insufficiency was noted on color flow assessment of the spectral 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** was subnormal; however, if the patient was sedated this would be normal. The **left ventricular outflow** tract demonstrated normal laminar flow and subjective structural integrity. The **right atrium** and auricle revealed normal size, structure and content. Trivial **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). Slight **pericardial effusion** was noted. A cystic **mass** was noted and measured 3.0 cm. The mass appeared to be in the pericardial space. No pleural effusion. There was a large amount of thoracic fat present.

SEX

Neutered male

AGE

12 years

WEIGHT

16 lbs

INTERPRETED BY

Eric Lindquist, DMV
DABVP, Cert. IVUSS

IMAGING PERFORMED BY

Dr. Petrone

HOSPITAL NAME

Long Branch AH

REFERRING VET

Dr. Petrone

FELINE CARDIAC PARAMETERS	BODY WEIGHT	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	16 lbs	NM	0.5	1.4	0.5	30	
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	1.7	1.7	2.0	1.2		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							

INVOICE

93079

DATE

11/15/21



PATIENT **ULTRASONOGRAPHIC FINDINGS**

Kobe Scala Mitral insufficiency with left atrial enlargement.
 Trivial tricuspid insufficiency.

SPECIES Slight pericardial effusion. Cystic mass in the pericardial space, possible pericardial diaphragmatic hernia.
 Feline

Subnormal contractility, yet if patient was sedated this is normal.

BREED

Domestic Shorthair

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

SEX

Neutered male

Pericardial neoplasia is a potential; however, I cannot rule out pericardial diaphragmatic hernia. However, there was no connection to abdominal viscera was noted with the pericardial tissue pattern. Ultrasound-guided FNA can be attempted in this patient. However, this does carry some risk. There is mitral insufficiency and signs of early left-sided heart failure in this patient. Low-dose Lasix is recommended at 6.25 mg b.i.d. and ace inhibitor at 0.5 mg/kg s.i.d. can be considered. A recheck echocardiogram is recommended. CT evaluation would be ideal as emanation of radiographs for potential pericardial diaphragmatic hernia of hepatic tissue would also be warranted. FNA of the structure could be considered and if herniated liver tissue then cytology would be definitive. Neoplastic process is a potential. There is no evidence of pleural effusion noted at this time; however, trace pericardial effusion is present. Recheck echocardiogram in 2-3 weeks as Pimobendan may be necessary off label in this patient as there is both primary cardiac disease with left atrial enlargement, mitral insufficiency as well as the infiltrative structure in the pericardial space.

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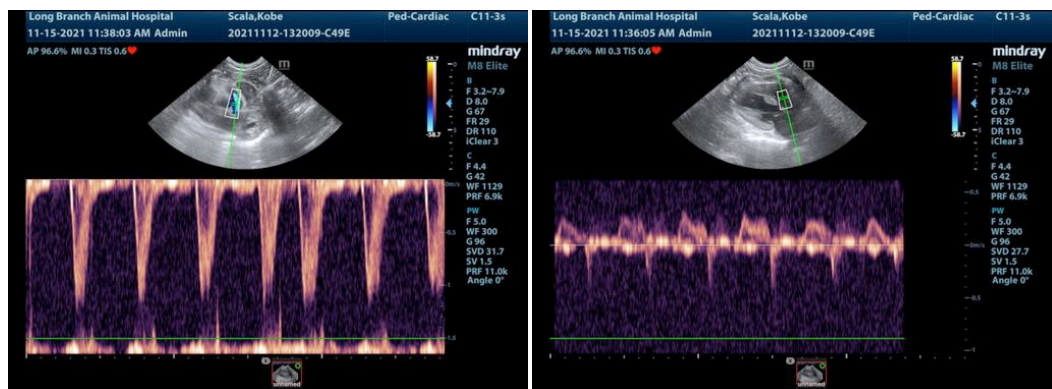
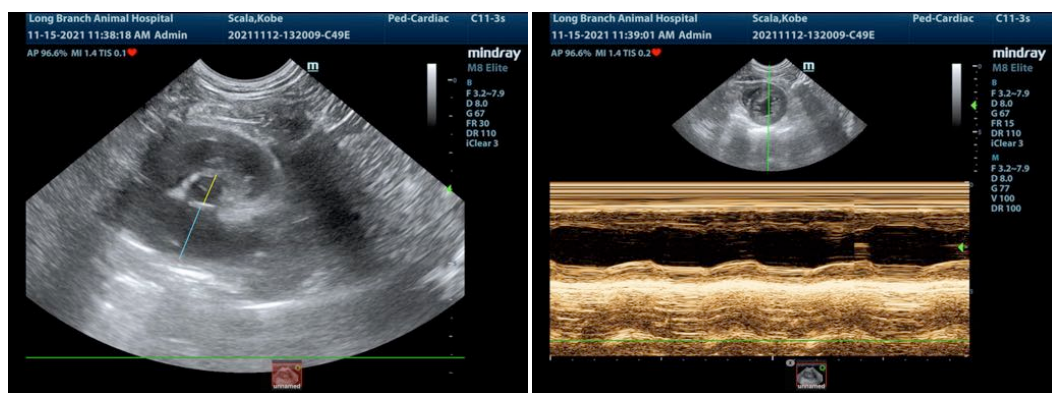
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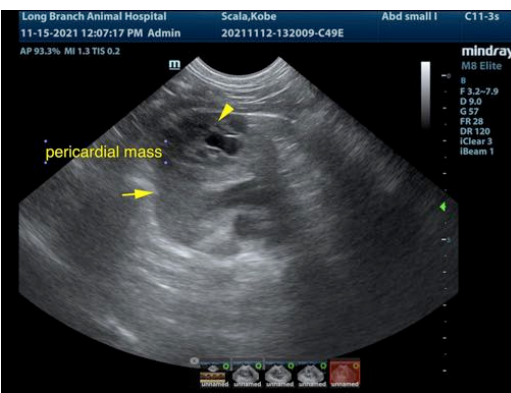
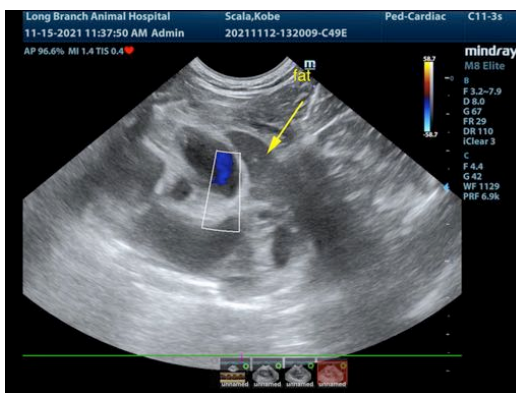
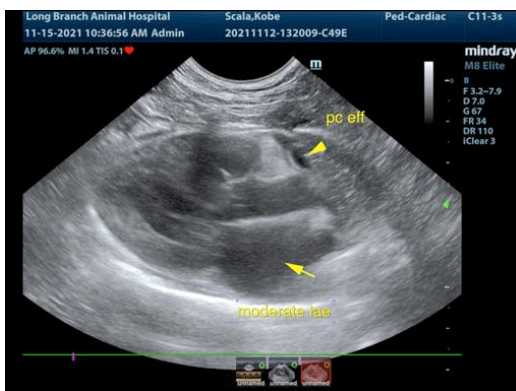
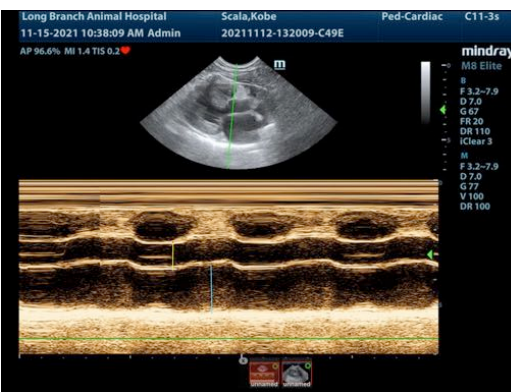
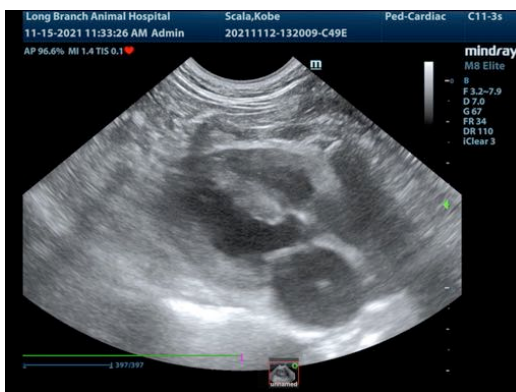
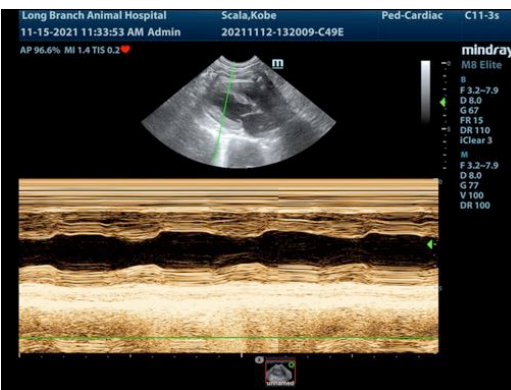
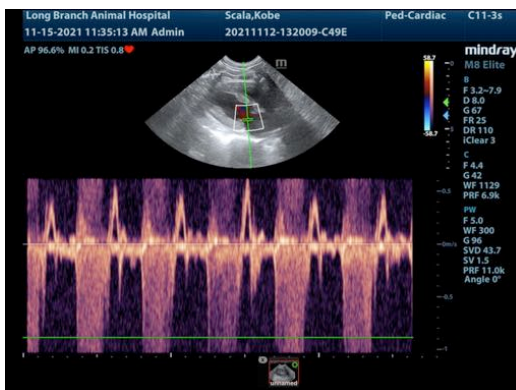
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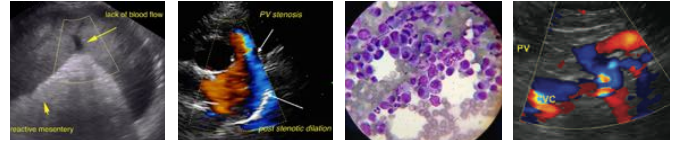
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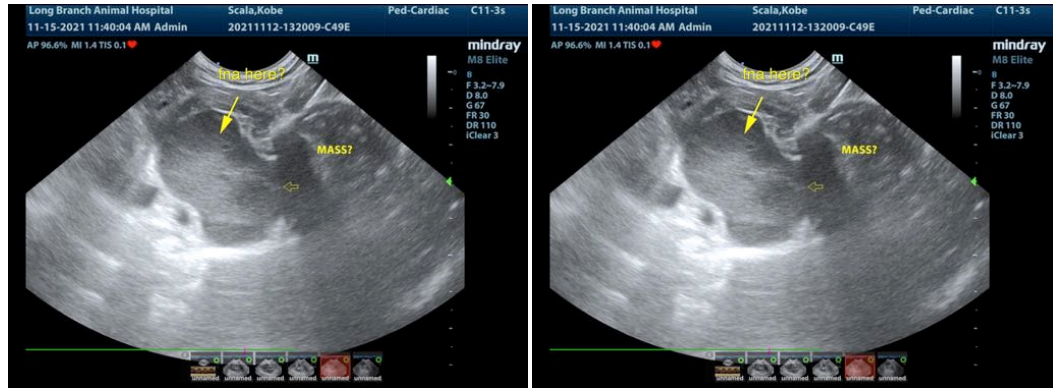
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The information and recommendations provided are based on the images presented by the referring veterinarian. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.

Eric Lindquist, DMV, DABVP, Cert. IVUSS, CEO of SonoPath.com
info@SonoPath.com