



**PATIENT PRESENTING CLINICAL SIGNS**

Tiger Shobara Renal failure, possible pulmonary congestion, difficult to auscultate murmur. Current meds: Lasix 0.2 mls IV q 8 hrs, Carafate, endurosyn, entyce, cerenia, pepcid.  
**SPECIES** Abnormal PE/Chem/CBC/UA Results: BUN 129, creat. 12.4, phos. 15.2, K+ 3.3, RBC 5.5, HCT 23.8, HGB 8.4. U/A: protein 2+, blood 3+, RBC 4-10, USG 1.010.

Feline

**ULTRASONOGRAPHIC EXAMINATION OF THE HEART & ABDOMEN**

BREED	FELINE CARDIAC PARAMETERS	BODY WEIGHT (kg)	HR (BPM)	IVSd (cm)	LVIDd (cm)	LVWd (cm)	FS (%)	EF (%)
DSH	NORMAL PARAMETER	-----	150-240	0.3-0.6	1.0-2.1	0.25-0.6	35-67	80-100
SEX	PATIENT		NM					
Neutered Male	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/)	
AGE	NORMAL PARAMETER	<1.5	0.88-1.79	0.7-1.7	<1.6	<1.3	40-60	
16 Years	PATIENT	1.4	1.4	1.65	1.23	0.84	NM	
WEIGHT	Adapted from June Boon, Veterinary Echocardiography, 1998							
9.8 Pounds	Sisson D et al. JVIM 1991; 5: 232, Jacobs et al. Am J Vet Res 1985; 46:1705							

**INTERPRETED BY**

Eric Lindquist, DMV  
DABVP, Cert. IVUSS

**IMAGING PERFORMED BY**

Kelly Vazquez

**HOSPITAL NAME**

Westwood Regional

**REFERRING VET**

Dr. Taylor McConnell

**INVOICE**

33769

**DATE**

12/28/21

**Cardiac Presentation**

The echocardiogram in this patient demonstrated normal **left atrial** size and structure with no evidence of “smoke” or thrombi. The cranial and caudal **mitral** valve leaflets appeared mildly thickened with some insufficiency noted on Doppler. The **left ventricle** presented excessive free wall and septal thicknesses with hypertrophic thicknesses compared to normal for this species. The **myocardium** presented essentially normal echogenicity without immediate signs of fibrotic or ischemic disease. **Contractility** of the ventricular walls was considered excessive for this patient evidenced by the elevated fractional shortening measurement. The **left ventricular outflow** tract demonstrated turbulent laminar flow. Subjective assessment of the **right atrium** and auricle revealed normal size, structure and content. No evidence of masses was noted. **Tricuspid** insufficiency noted. The **right ventricle** was of normal size with normal chordae structure, myocardial echogenicity and thickness. **Pulmonic** tract assessment revealed normal valve structure, laminar flow, and diameter. Slight pericardial effusion noted. Non-cardiogenic pleural effusion and irregular lung consolidation noted, strongly consistent with thoracic neoplasia. Lung consolidation in the caudal abdomen appears to be obstructing the vena cava.

**Urinary System**

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 were noted. Ureteral papillae were normal.

The **kidneys** presented an interstitial nephrosis pattern, moderate to end stage with cortical infarcts. The left kidney measured 3.62 cm.



**PATIENT**

**Adrenal Glands**

Tiger Shobara

The **adrenal glands** were uniform, yet bilaterally swollen and hypoechoic. This is most consistent with stress-induced hyperplasia. The right adrenal gland measured 0.46 cm.

**SPECIES**

**Spleen**

Feline

The **spleen** in this patient was uniform, yet volume contracted. Hydration status should be assessed. The spleen measured 0.49 cm.

**BREED**

**Liver**

DSH

Passive congestion **liver** pattern noted, likely the cause of ascites.

**Gastrointestinal**

**SEX**

Neutered Male

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. No associated abnormal lymphatic activity was noted.

**AGE**

**Pancreas**

16 Years

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.

**WEIGHT**

**Free Abdomen**

9.8 Pounds

Free fluid noted in the caudal abdomen.

**INTERPRETED BY**

**ULTRASONOGRAPHIC FINDINGS**

Eric Lindquist, DMV  
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- Left ventricular concentric hypertrophy – possibly owing to hypertension, contained volume
- Non-cardiogenic pleural and slight pericardial effusion
- Thoracic lung lesions
- Passive congestion liver pattern and secondary ascites
- End stage renal disease

**IMAGING PERFORMED BY**

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

Kelly Vazquez

**HOSPITAL NAME**

Pleurocentesis and cytospin of the chest recommended to assess for exfoliating neoplasia. Humane euthanasia should be considered in this patient.

Westwood Regional

**REFERRING VET**

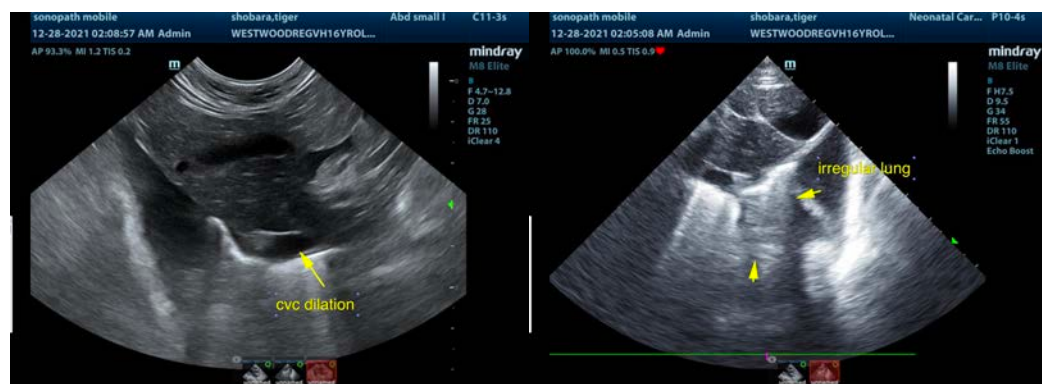
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**PATIENT**

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Neutered Male

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16 Years

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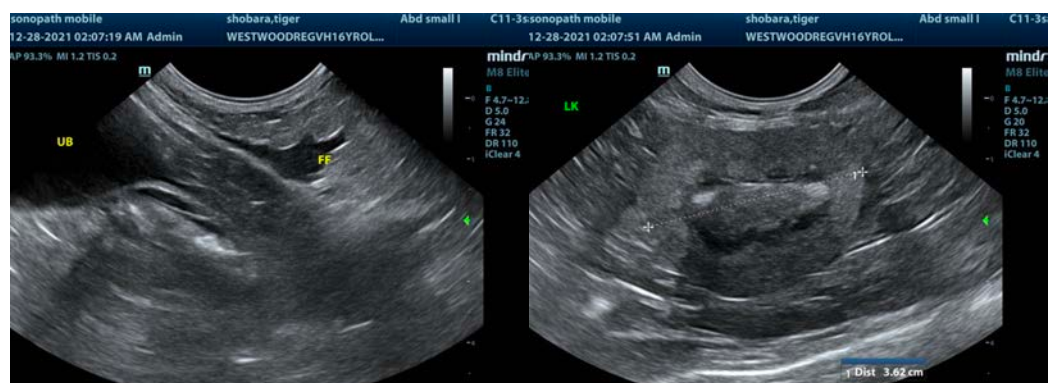
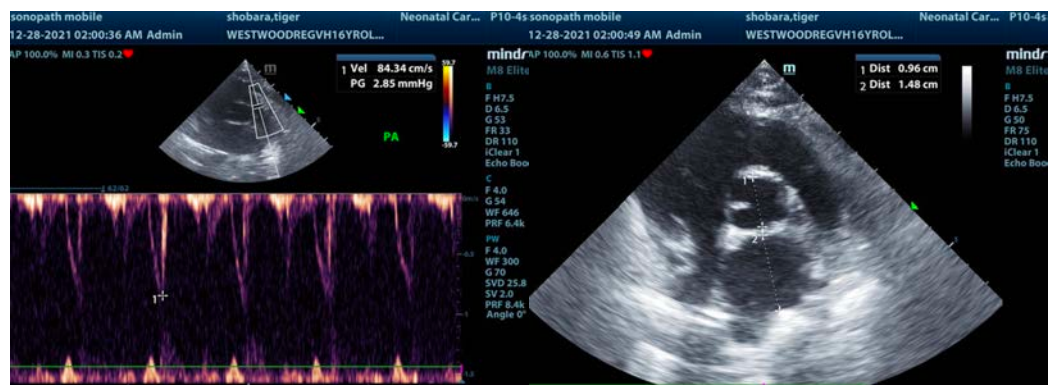
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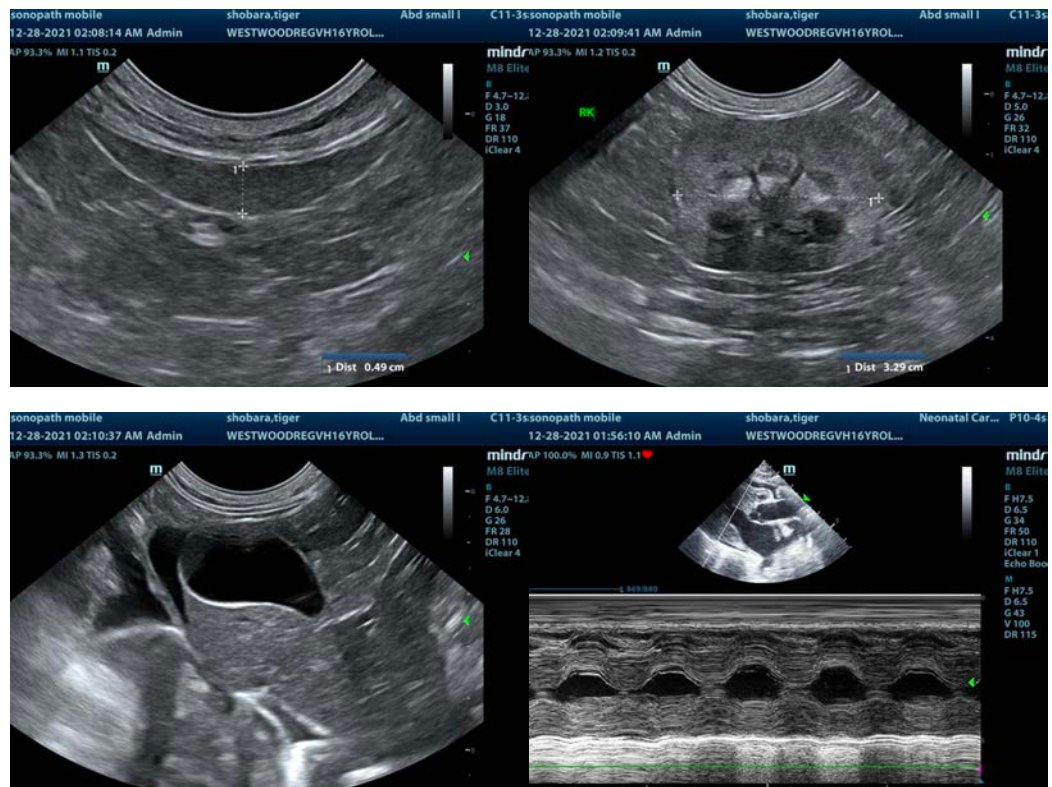
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The information and recommendations provided are based on the images presented by the referring veterinarian. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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  
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