



**PATIENT PRESENTING CLINICAL SIGNS**

Reis Brenner Hx of mitral valve insufficiency Currently on Pimo, enalapril, lasix Monitoring  
Abnormal PE/Chem/CBC/UA Results: Grade V/VI LAS murmur

**SPECIES ULTRASONOGRAPHIC EXAMINATION OF THE HEART & ABDOMEN**

Canine

**BREED**

Beagle X

**SEX**

Spayed Female

**AGE**

13 Years

**WEIGHT**

37.4 Pounds

CANINE CARDIAC PARAMETERS	MR VMAX (m/s)	TR VMAX (m/s)	LA/AO (Boon method)	LA/AO (Heart Base; Swe)	FS (%)	EF (%)	EPSS (cm)
NORMAL PARAMETER	4.5-5.5	<2.7	1.3	<1.6	28-40	40-100	<0.6
PATIENT			1.3		45		0.1
CANINE CARDIAC PARAMETERS	HR (BPM)	AV VMAX (m/s)	PV MAX (m/s)	BODY WEIGHT (kg)	LA 2D short axis Base view (cm)	LVIDd Avg; 2D and m-mode short axis (cm)	LVIDs Avg; 2D and m-mode short axis (cm)
NORMAL PARAMETER	50-100	0.7-1.7	0.7-1.6				
PATIENT			1.3		3.63	2.8	

**Cardiac Presentation**

The cardiac presentation revealed vegetative mitral valve with prolapse. Mild left atrial enlargement noted. Left ventricular internal diameter, contractility and structure appeared unremarkable. Periodic arrhythmia noted, may be sinus arrhythmia. Aortic insufficiency noted on color flow assessment of the aortic valve.

**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 iliac trifurcation was unremarkable.

The kidneys revealed largely normal size and structure, corticomedullary definition and ratio (cortex 1/3 of medulla) were essentially maintained with some age-related loss of curvilinear patterns regarding the capsule and C/M junction. The cortices presented largely uniform texture with some increased echogenicity expected for his age patient. Medullary structure differed distinctly from that of the cortex. The left kidney measured 4.0 cm. A pelvic calculus was noted in the right kidney measuring 5.0 mm, non-obstructive. Minor pyelectasia noted in both kidneys.

**Adrenal Glands**

The left adrenal gland was slightly heterogeneous at the caudal pole. The right adrenal gland was slightly irregular.

**INTERPRETED BY**

Eric Lindquist, DMV  
DABVP, Cert. IVUSS

**IMAGING PERFORMED BY**

Dr. Adrienne Waffle

**HOSPITAL NAME**

Torch Lake VC

**REFERRING VET**

Dr. Adrienne Waffle

**INVOICE**

33740

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12/27/21



**PATIENT**

**Spleen**

Reis Brenner

The **spleen** presented a smooth homogeneous parenchyma hyperechoic to liver and renal cortical parenchyma. The capsule was smooth without noticeable expansion or deviation from within the spleen or adjacent pathology. The splenic vasculature demonstrated normal volume without signs of congestion or thrombosis. No sonographic evidence of acute or chronic inflammatory, neoplastic, or infarctual changes were noted.

**SPECIES**

Canine

**Liver**

**BREED**

Beagle X

The **liver** images from right and left intercostal as well as subcostal views revealed subjectively normal liver size, contour, and structure. Some age-related parenchymal remodeling was noted but likely not clinically significant at this time. Vascular and biliary tracts were of normal volume and no evidence of congestion was noted. The gallbladder presented some dependent debris with essentially normal contour. The cystic and common bile ducts were normal. No overt evidence of active inflammatory, infiltrative or regenerative pathology was noted but should be paired with current or past LE elevations regarding any clinical significance to this presentation. The hepatic lymph nodes were unremarkable.

**SEX**

Spayed Female

**Gastrointestinal**

**AGE**

13 Years

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.

**WEIGHT**

37.4 Pounds

**Pancreas**

Diffuse hyperechoic changes were present in the area of the **pancreas**. The pancreatic remodeling was evident with multifocal to diffuse hyperechoic changes. These changes are consistent with fibrosis, amyloid, saponification of fat and may contain areas of low-grade chronic active inflammation especially if pain on imaging (+ Murphy sign) was present +/- focal subxyphoid palpation reveals pain response. No overt masses were noted.

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**ULTRASONOGRAPHIC FINDINGS**

**IMAGING PERFORMED BY**

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- Mitral and aortic insufficiency, fairly stable valvular disease on current protocol
- Arrhythmia
- Minor age related adrenal changes
- Moderate degenerative renal changes with right renal pelvic calculus
- Pancreatic remodeling
- Age related abdomen otherwise

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**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

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EKG indicated, as arrhythmia is noted. Recheck echo in 6 months, earlier if clinical signs initiate. Blood pressure measurements warranted.

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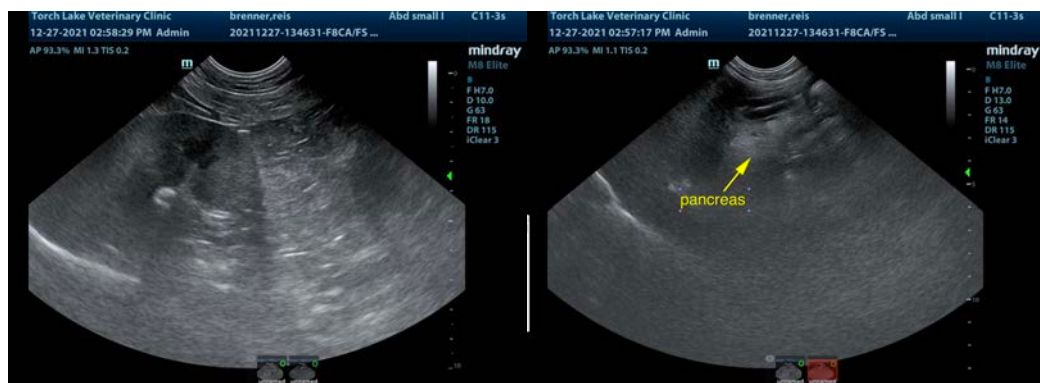
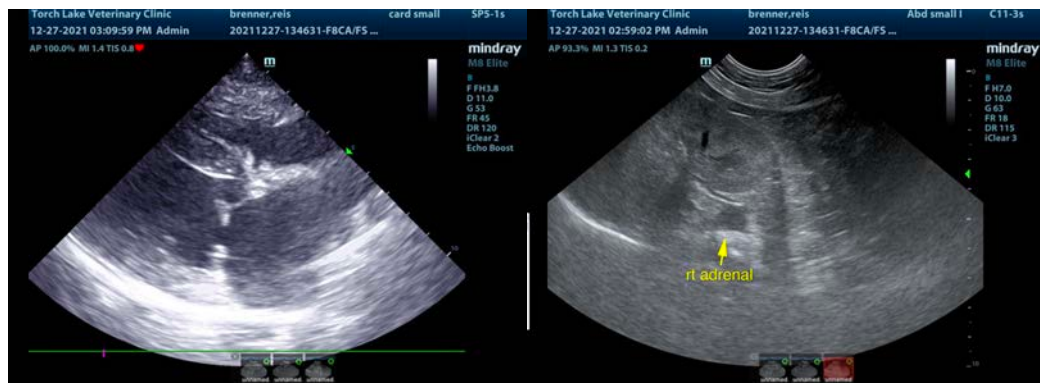
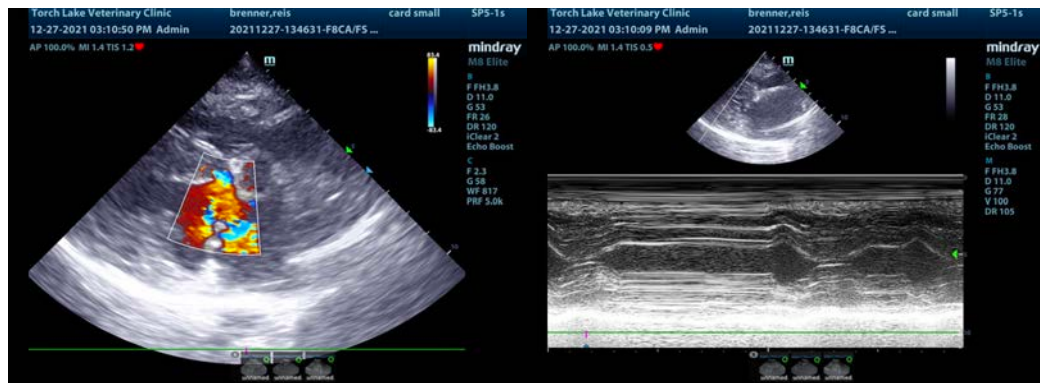
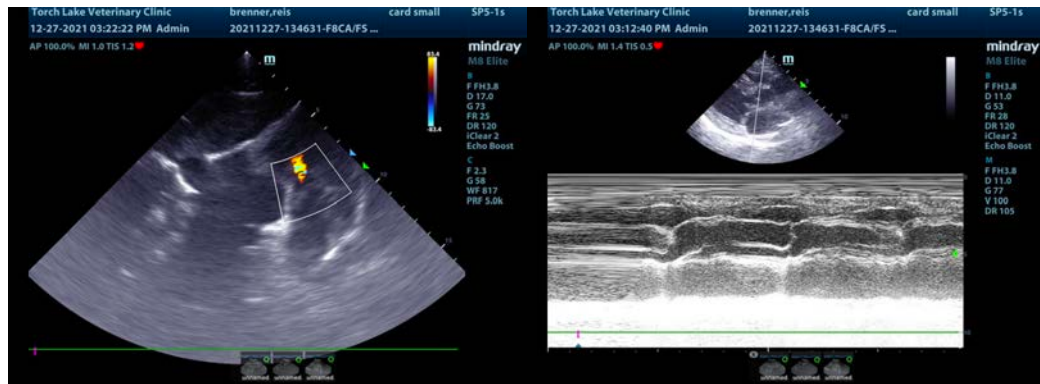
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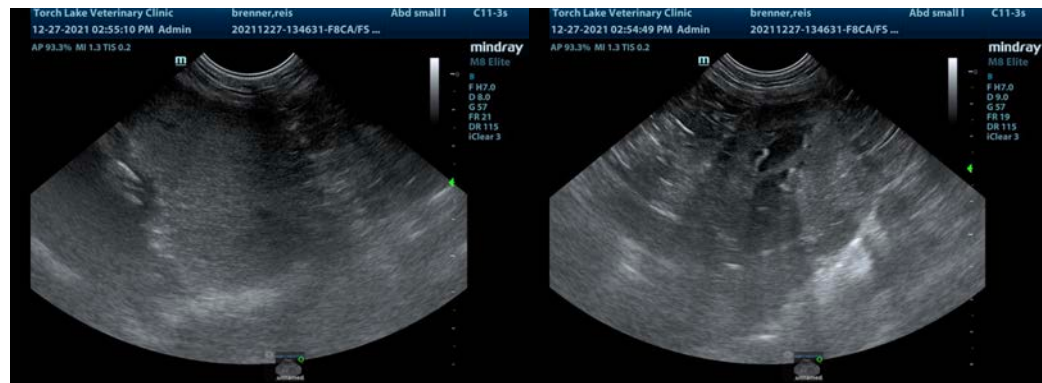
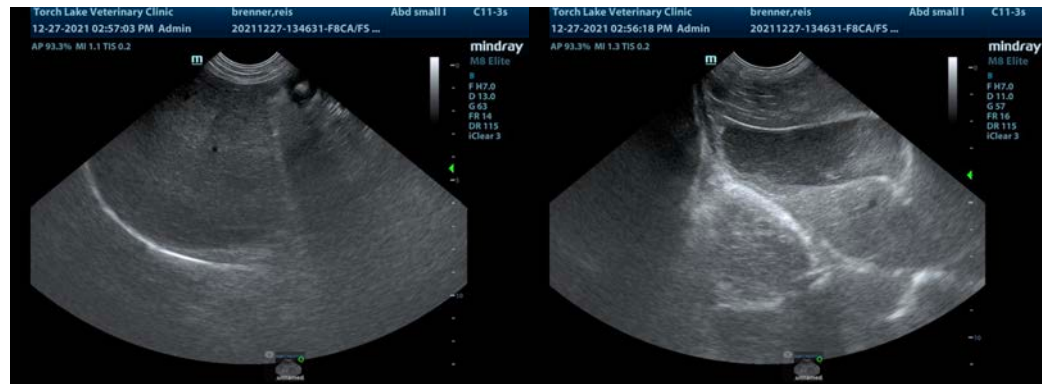
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The information and recommendations provided are based on the images presented by the referring veterinarian. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.

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