



**PATIENT PRESENTING CLINICAL SIGNS**

Hope Lopinski Bloodwork normal. Has started having petit mal seizure activity and focal seizures. Wanted to pursue an ultrasound before appt at referral for neurology.

**SPECIES**

Canine

**ULTRASONOGRAPHIC EXAMINATION OF THE HEART & ABDOMEN**

**BREED**

Bulldog

**SEX**

FS

**AGE**

2 years

**WEIGHT**

62 lbs

CANINE	MR	TR	LA/AO	LA/AO	FS	EF	EPSS
<b>CARDIAC PARAMETERS</b>	<b>VMAX</b> (m/s)	<b>VMAX</b> (m/s)	(Boon method)	(Heart Base; Swe)	(%)	(%)	(cm)
<b>NORMAL PARAMETER</b>	4.5-5.5	<2.7	1.3	<1.6	28-40	40-100	<0.6
<b>PATIENT</b>			1.2	1.1	35	65.4	0.25
CANINE	HR	AV	PV	BODY WEIGHT	LA	LVIDd	LVIDs
<b>CARDIAC PARAMETERS</b>	(BPM)	<b>VMAX</b> (m/s)	<b>MAX</b> (m/s)	(kg)	2D short axis Base view (cm)	Avg; 2D and m-mode short axis (cm)	Avg; 2D and m-mode short axis (cm)
<b>NORMAL PARAMETER</b>	50-100	0.7-1.7	0.7-1.6	BELOW	BELOW	BELOW	BELOW
<b>PATIENT</b>	147	1.4	1.6		3.6	3.5	

**INTERPRETED BY**

R. McKenzie Daniel, DVM, DABVP

**IMAGING PERFORMED BY**

Crystal Hill

**HOSPITAL NAME**

The Maples AH

**REFERRING VET**

Dr. Kazienko

**INVOICE**

13595

**DATE**

3/31/22

**Cardiac Presentation**

The echocardiogram in this patient demonstrated normal **left atrial** size based on 3 separate methods of LA evaluation. The cranial and caudal **mitral** valve leaflets presented normal linear structure, extension in systole, and union in diastole with normal kinesis. The **left ventricle** presented 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 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. **Tricuspid** valvular assessment demonstrated adequate linear morphology and kinesis. The **right ventricle** was of normal size (1/3 diameter of LV), chordae structure, myocardial echogenicity and thickness. **Pulmonary outflow** tract assessment revealed normal valve structure, laminar flow, and diameter (approx. 1:1 pa/ao ratio). No visible **pericardial** or free pleura fluid was noted. The cranial **mediastinum and pericardial and extra-cardiac regions** were free of masses in the visible window. No obvious arrhythmia was noted.

**Urinary System**

The urinary bladder, trigone, cystourethral junction, and visible pelvic urethra to a depth of 3.0 cm exhibited normal thickness and tone. Anechoic urine was present in the lumen with no uroliths,



<b>PATIENT</b>	sediment, or calculi. The ureteral papillae were normal. The ureters were not visible which is normal. No evidence of inflammatory or neoplastic changes was noted.
Hope Lopinski	The area of the aortic trifurcation was free of pathology.
<b>SPECIES</b>	Normal size and margination were present in the kidneys. A normal 1:3 cortex / medulla ratio and normal corticomedullary definition were maintained. The echogenicity of the cortex was similar to or slightly less than normal liver parenchyma while the medulla echogenicity was hypoechoic to the cortex with no evidence of pelvic dilation. The left kidney measured 5.8 cm in length. The right kidney measured 6.2 cm in length.
Canine	
<b>BREED</b>	
Bulldog	<b>Adrenal Glands</b>
<b>SEX</b>	The left adrenal gland was uniform in size and contour with a uniformly hypoechoic parenchyma. The left adrenal gland measured 2.3 cm length x 0.51 cm width at the caudal pole. The right adrenal gland was indistinctly visualized owing to patient conformation, without overt pathology. The right adrenal gland subjectively measured 0.66 cm width at the caudal pole.
FS	
<b>AGE</b>	<b>Spleen</b>
2 years	The spleen exhibited a finely textured and homogenous parenchyma which was hyperechoic to the liver and renal cortical parenchyma. The capsule was smooth and regular without apparent expansion. The splenic vasculature at the hilus was normal in volume with no evidence of congestion or thrombosis. Acute to chronic inflammatory, neoplastic, or benign parenchyma changes were not noted.
<b>WEIGHT</b>	<b>Liver/ Gallbladder</b>
62 lbs	The liver was subjectively normal in size, structure, and contour. The liver parenchyma was uniform and hypoechoic to the spleen with a mild coarse echotexture. The hepatic and portal vasculature were normal in appearance without signs of congestion. Normal hepatic vascular volume was noted. No evidence of portosystemic vascular anomaly was evident. The gallbladder was non-distended in size with thin walls and primarily anechoic luminal content. The cystic and common bile ducts were normal.
<b>INTERPRETED BY</b>	
R. McKenzie Daniel, DVM, DABVP	
<b>IMAGING PERFORMED BY</b>	
Crystal Hill	
<b>HOSPITAL NAME</b>	<b>Gastrointestinal</b>
The Maples AH	The stomach presented intact wall layering with a normal wall layer ratio. The lumen of the stomach contained mild, ingesta / chyme, which is likely nonspecific yet likely consistent with recent meal ingestion.
<b>REFERRING VET</b>	
Dr. Kazienko	The small intestine presented intact wall layering with 1:3 muscularis/mucosa ratio. The lumen of the small intestine was empty with no signs of ileus, obstruction, or foreign material.
<b>INVOICE</b>	Normal visible colon wall layers were present with apparent formed feces in lumen.
13595	<b>Pancreas</b>
<b>DATE</b>	The parenchyma of the left limb, body, and right limb of the pancreas presented isoechoic to the adjacent omental fat. A normal curvilinear capsule contour of the pancreas was present. The visible pancreatic duct was normal. No signs of active inflammation or neoplastic disease were evident.
3/31/22	



**PATIENT**

*Free Abdomen*

Hope Lopinski

No omental masses, lymphadenopathy or peritoneal effusion were present.

**SPECIES**

Canine

**ULTRASONOGRAPHIC FINDINGS**

*Primary Findings*

- Normal echocardiogram
- Sonographically unremarkable abdomen

**BREED**

Bulldog

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

**SEX**

Overtly normal cardiac structure and function without evidence of abdominal visceral pathology as a definitive cause or contributing factor to the patient's seizure activity.

FS

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**WEIGHT**

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**HOSPITAL NAME**

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**REFERRING VET**

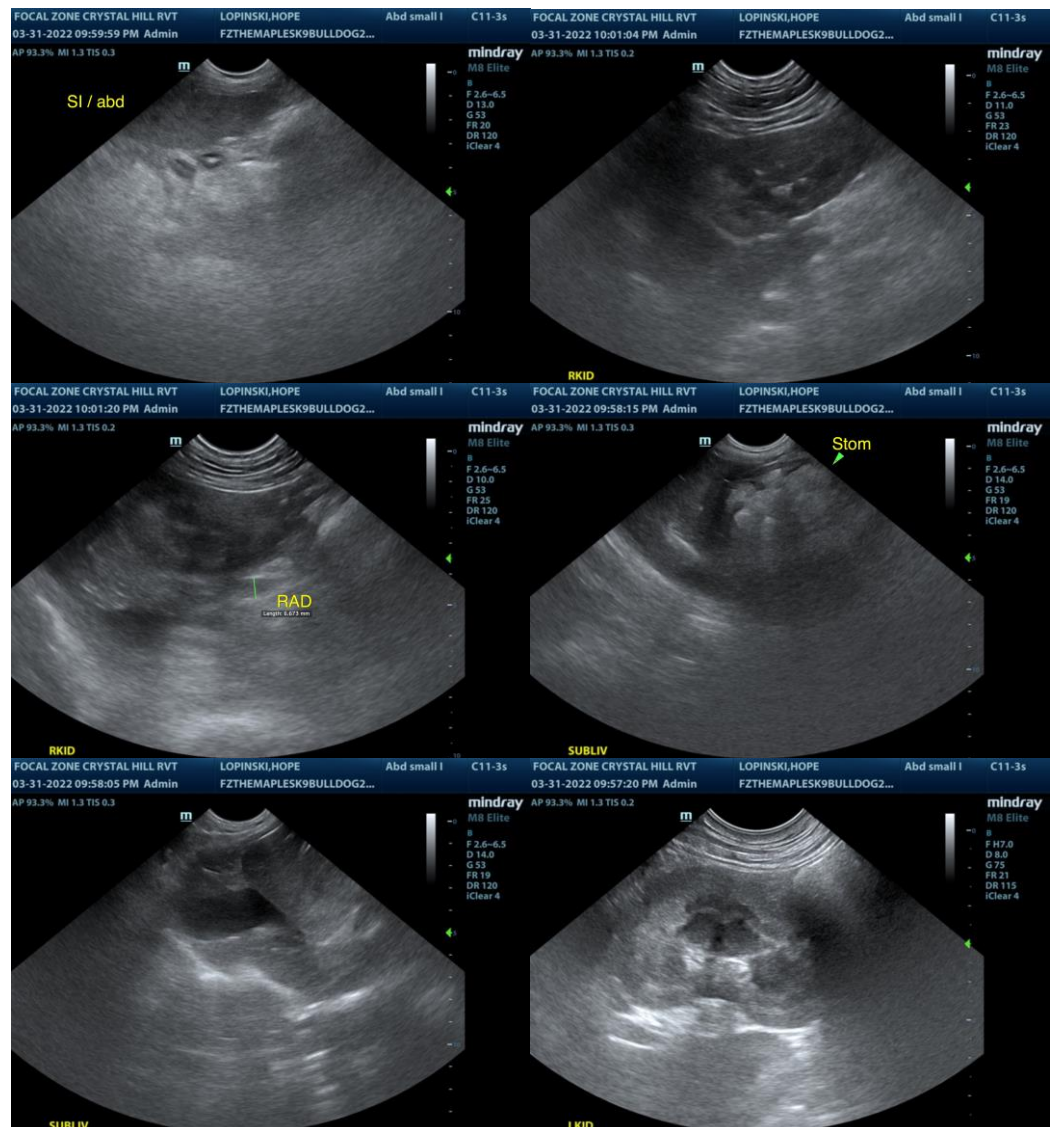
Dr. Kazienko

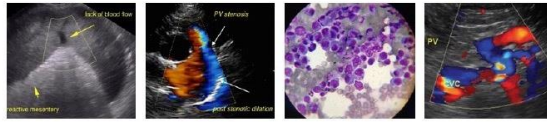
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**PATIENT**

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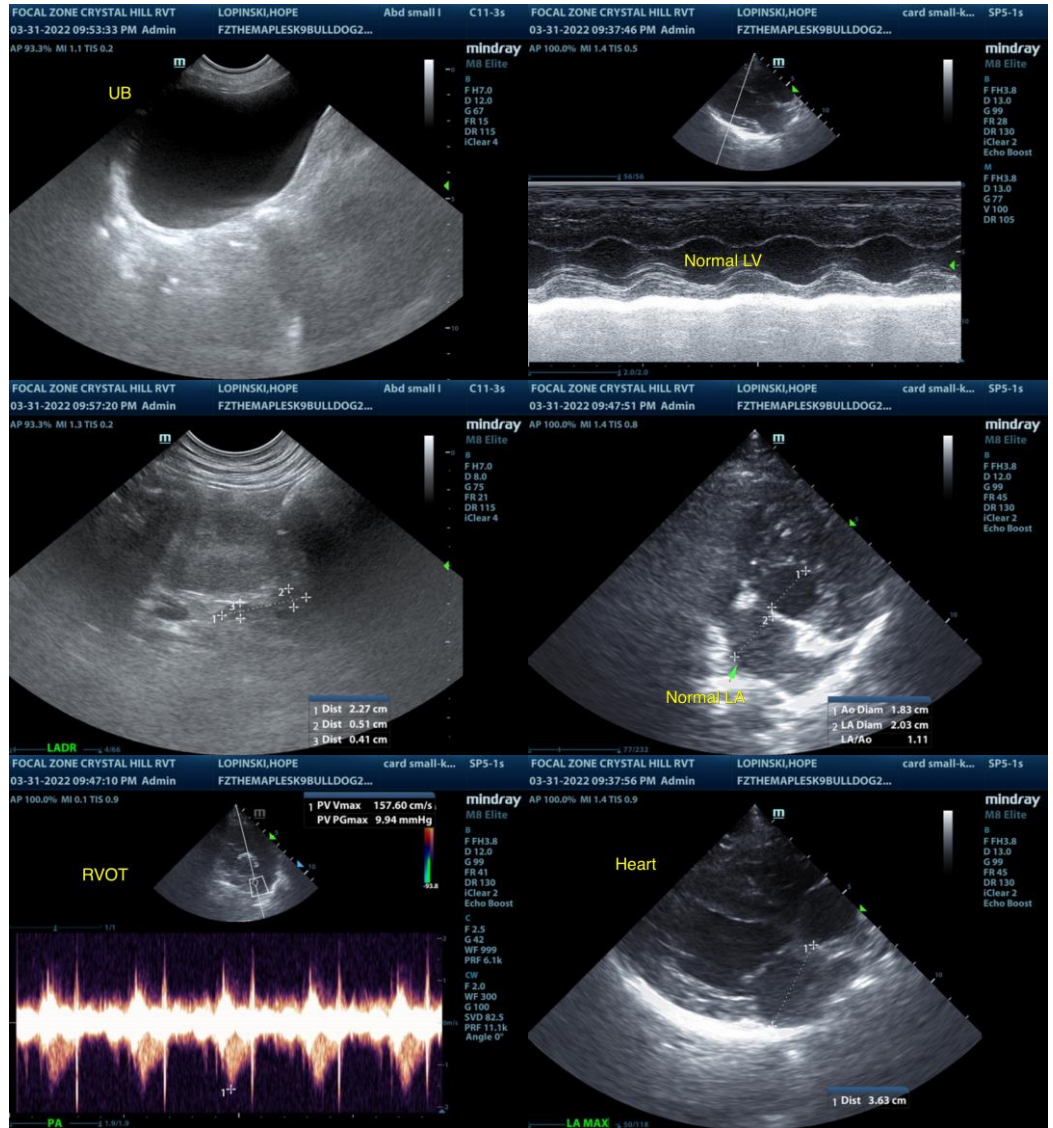
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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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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