


**PATIENT PRESENTING CLINICAL SIGNS**

Rye Sabo very picky eater and will not eat well at all and has lost 9.5kg since May and has a BCS of 2/5. Intermittent vomiting for several months - almost daily and recently was vomiting several times a day for a few weeks and since last round of Cerenia that has stopped)

**SPECIES** Abnormal PE/Chem/CBC/UA Results: -had pancreatitis with a cPL of 262 April 19, 2021. When Canine blood was rechecked in July 2021, the snap cPL was normal. Please see attached labwork and rads.

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

Doodle

**SEX**

FS

**AGE**

11 years

**WEIGHT**

19 kg

**INTERPRETED BY**

 R. McKenzie Daniel,  
 DVM, DABVP

**IMAGING PERFORMED BY**

Crystal Hill

**HOSPITAL NAME**

 Oxford County Vet  
 Clinic

**REFERRING VET**

Dr. Andratis

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**DATE**

9/28/21

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>		2.0	--	1.4	38.5	72.1	0.4
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>	NM	NM	0.9		3.1	3.9	

**Cardiac Presentation**

The echocardiogram in this patient demonstrated normal **left atrial** size based on 3 different LA measurement methods. Chamber volumes and echogenicity were normal. The cranial and caudal **mitral** valve leaflets presented minor vegetative thickening suggestive of mild endocardiosis. Doppler indicated measurable centralized to eccentric insufficiency. 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 or chamber overload. **Tricuspid** valvular assessment demonstrated adequate linear morphology. Color doppler assessment revealed minor tricuspid valve Insufficiency. 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). No visible **pericardial** or free pleura fluid was noted. No echographically



**PATIENT** detectable evidence of infiltrative disease was visible. The cranial **mediastinum and pericardial regions** were free of masses in the visible window.

Rye Sabo

### **Urinary System**

**SPECIES**

Canine

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 or sediment. The ureteral papillae were normal. The ureters were not visible which is normal. No evidence of inflammatory or neoplastic changes was noted.

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The area of the aortic trifurcation was free of pathology.

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Normal size and margination were present in the kidneys. A normal 1:3 cortex / medulla ratio was maintained. The medulla and cortices were uniform in texture with some increased echogenicity and mild loss of corticomedullary symmetry and definition expected for the age of the patient. No evidence of pelvic dilation was present. The left kidney measured 5.4 cm in length. The right kidney measured 5.3 cm in length.

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### **Adrenal Glands**

The bilateral adrenal glands were normal in size. Mild parenchyma heterogeneity and mild capsule asymmetry was present without suspicion for overt neoplasia. The left adrenal gland measured 0.52 cm width in the cranial pole and 0.49 cm width in the caudal pole. The right adrenal gland measured 0.59 cm width in the cranial pole and 0.58 cm width in the caudal pole.

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### **Spleen**

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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.

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### **Liver/ Gallbladder**

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The liver was subjectively normal in size, structure, and contour. The liver parenchyma was mildly nonuniform and hypoechoic to the spleen with a moderate coarse echotexture and subjective mild to benign parenchymal remodeling. The hepatic and portal vasculature were normal in appearance without signs of congestion.

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The gallbladder was non-distended in size with thin walls and primarily anechoic luminal content. The cystic and common bile ducts were normal.

### **Gastrointestinal**

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Regional moderate to severe gastric wall thickening and loss of gastric wall layer detail was present. The thickened gastric walls exhibited decreased echogenicity and an asymmetrical luminal surface. Mild retained anechoic fluid was present in the gastric lumen without evidence of foreign material. The thickened walls subjectively primarily involve the gastric fundus and body yet extending somewhat into the pylorus. The gastric body wall measured 1.7 cm - 1.8 cm width.

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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.

Normal visible colon wall layers were present with apparent formed feces in lumen.

**SPECIES**

Canine

***Pancreas***

Sonographic assessment of the pancreas was limited owing to regional perigastric omental artifact and overlying gastric gas.

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***Free Abdomen***

Regional, perigastric reactive mesentery to potential perigastric peritonitis was present. Overt evidence of associated perigastric lymphadenopathy was not noted yet cannot be definitively excluded.

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**ULTRASONOGRAPHIC FINDINGS**

**AGE**

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***Primary Findings***

- Compensated mitral valve insufficiency (B1)
- Mild tricuspid valve insufficiency
- Gastric mural mass with regional perigastric reactive to inflamed mesentery

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***Secondary Findings***

- Bilateral mild chronic renal changes
- Minor hepatic parenchymal remodeling - subjectively benign

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**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

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No indication for cardiac mediations.

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Although sampling is required for further clarification, the thickened gastric walls with decreased mural echogenicity and loss of distinct wall layering are strongly suggestive of infiltrative gastric neoplasia such as lymphoma, carcinoma, or other. Biopsies are recommended for a definitive diagnosis. However, subjectively, given the extent of gastric mural pathology, curative surgical options in this case are likely precluded. If a neoplastic process is confirmed, oncology consultation is recommended.

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Empirically, gastroprotectant protocol, as-needed anti-nausea, and canned hydrolyzed diet may be considered.

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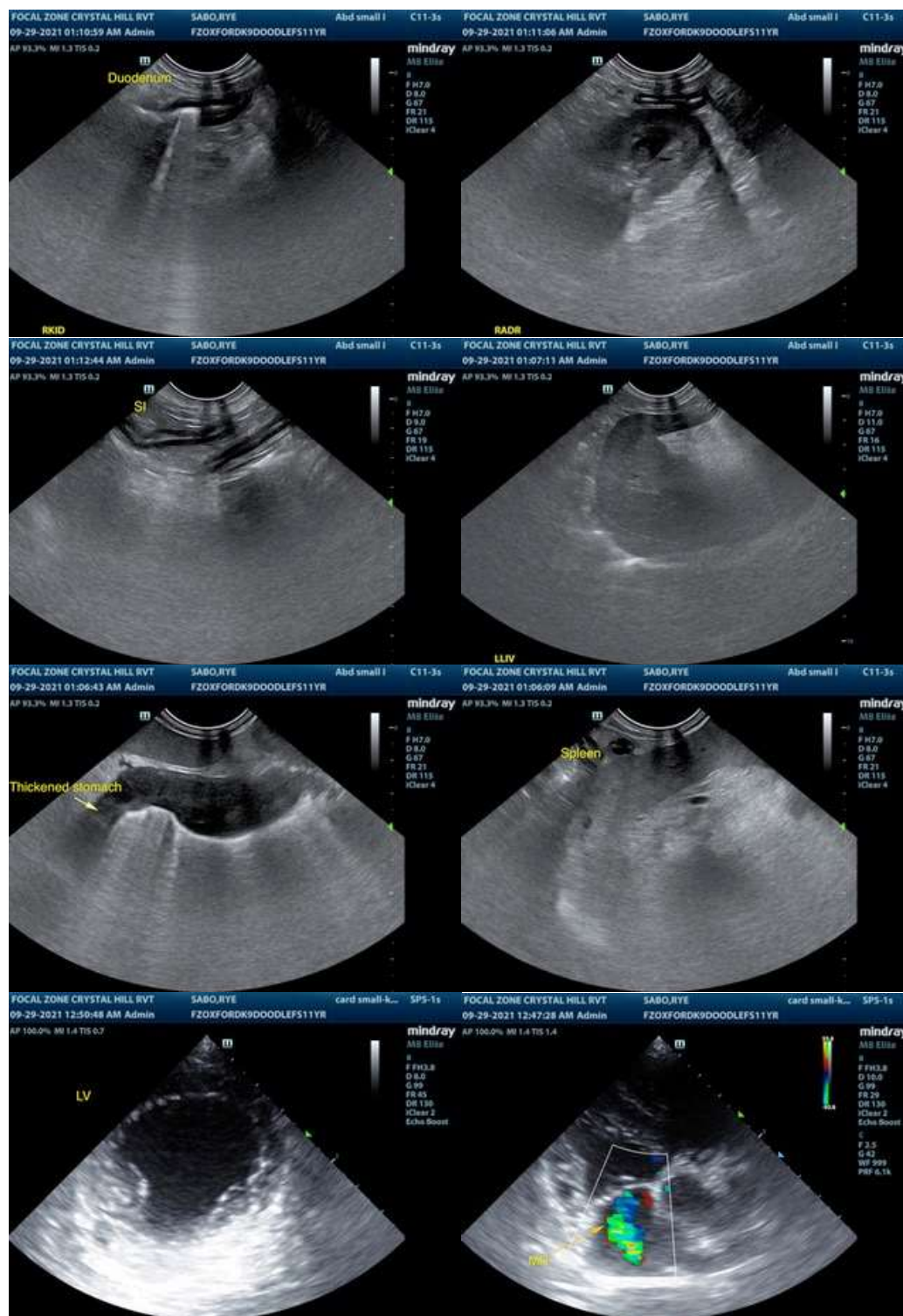
Dr. Andratis

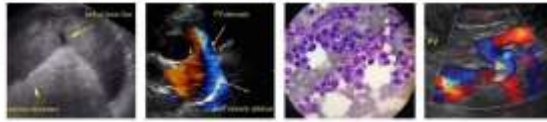
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The information and recommendations provided are based on the images presented by the referring veterinarian. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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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