



PATIENT PRESENTING CLINICAL SIGNS

Amber Sol concerns over anorexia, off and on vomiting meds:cerenia

SPECIES ULTRASONOGRAPHIC EXAMINATION OF THE HEART & ABDOMEN

Canine

BREED

Golden Ret

SEX

FS

AGE

12 years

WEIGHT

31 kg

CANINE	MR	TR	LA/AO	LA/AO	FS	EF	EPSS
CARDIAC PARAMETERS	VMAX (m/s)	VMAX (m/s)	(Boon method)	(Heart Base; Swe)	(%)	(%)	(cm)
NORMAL PARAMETER	4.5-5.5	<2.7	1.3	<1.3	28-40	40-100	<0.6
PATIENT			1.1	1.23	42	75	0.3
CANINE	HR	AV	PV	BODY WEIGHT	LA	LVIDd	LVIDs
CARDIAC PARAMETERS	(BPM)	VMAX (m/s)	MAX (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)
NORMAL PARAMETER	50-100	0.7-1.7	0.7-1.6				
PATIENT	NM	1.8	1.5		4.1	3.7	

INTERPRETED BY

R. McKenzie Daniel,
DVM, DABVP

IMAGING PERFORMED BY

Kelly Reschny

HOSPITAL NAME

Graham Animal
Hospital

REFERRING VET

Dr. Sprenger

INVOICE

15288

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10/27/22

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.

Urinary System

The urinary bladder, trigone, and cystourethral junction 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.



PATIENT	The area of the aortic trifurcation was free of pathology.
Amber Sol	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 6.3 cm in length. The right kidney measured 6.2 cm in length.
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Adrenal Glands

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 0.56 cm width at the caudal pole. The right adrenal gland was uniform in size and contour with a uniformly hypoechoic parenchyma. The right adrenal gland measured 2.1 cm length x 0.44 cm width at the caudal pole.

Spleen

Mildly expansive, hypoechoic, mildly nonhomogeneous mass was noted in the subjective caudal spleen, measuring approximately 7.0 cm in diameter. The spleen not involved with the mass exhibited mild generalized parenchyma heterogeneity. Normal splenic vascularity was present.

Liver/ Gallbladder

The liver exhibited generalized enlargement. A moderately expansive, hypoechoic, mildly nonhomogeneous mass was noted left liver measuring 9.0-10.0 cm in diameter. A suspected separate mass was present in the right lateral to caudate liver. The mass in the subjective right lateral to caudate liver measured 8.0 cm in diameter. Concurrent intermittent, nondisruptive, hypoechoic hepatic intraparenchymal nodules were present. The gallbladder was non-distended in size containing mild gallbladder debris. The gallbladder was otherwise normal. The cystic and common bile ducts were normal.

Gastrointestinal

The stomach presented intact wall layering with a normal wall layer ratio. Minor nonshadowing ingesta / chyme was present.

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.

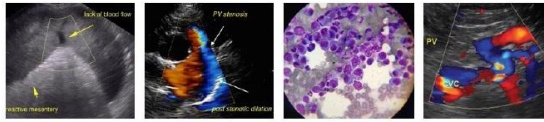
Normal visible colon wall layers were present with apparent formed feces in lumen.

Pancreas

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.

Free Abdomen

No omental masses, lymphadenopathy, or evidence of peritoneal free fluid were noted.



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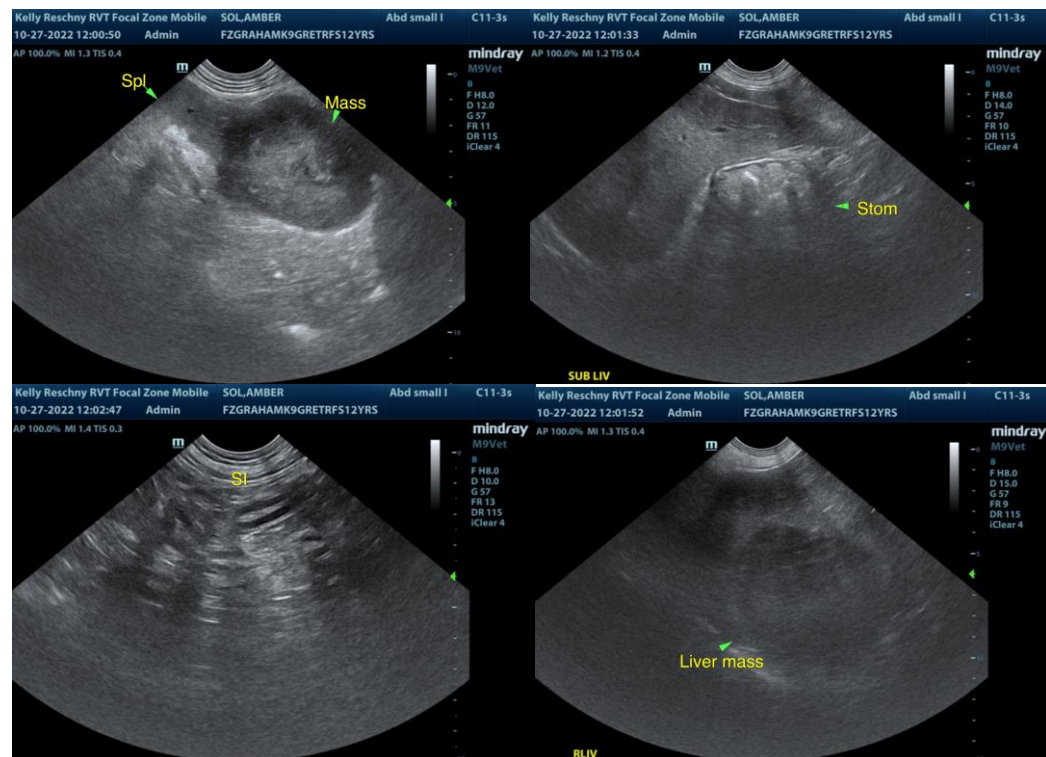
ULTRASONOGRAPHIC FINDINGS

- Normal echocardiogram
- Splenic mass
- Hepatomegaly with intraparenchymal mass / masses and concurrent nodules
- Minor gallbladder debris (non-mucocele)
- Sonographically unremarkable gastrointestinal tract with mild gastric ingesta / chyme
- Mild age-related renal changes

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Although sampling is required for further assessment, the hepatosplenic masses are consistent with neoplastic criteria. Round cell neoplasia, sarcoma, or other are possible.

Screening hepatosplenic mass FNA cytology could be considered for further assessment and potential for oncology consult. Given evidence of multicentric neoplasia, surgical options appear to be precluded. Three-view chest radiographs with as-needed GI support are recommended.





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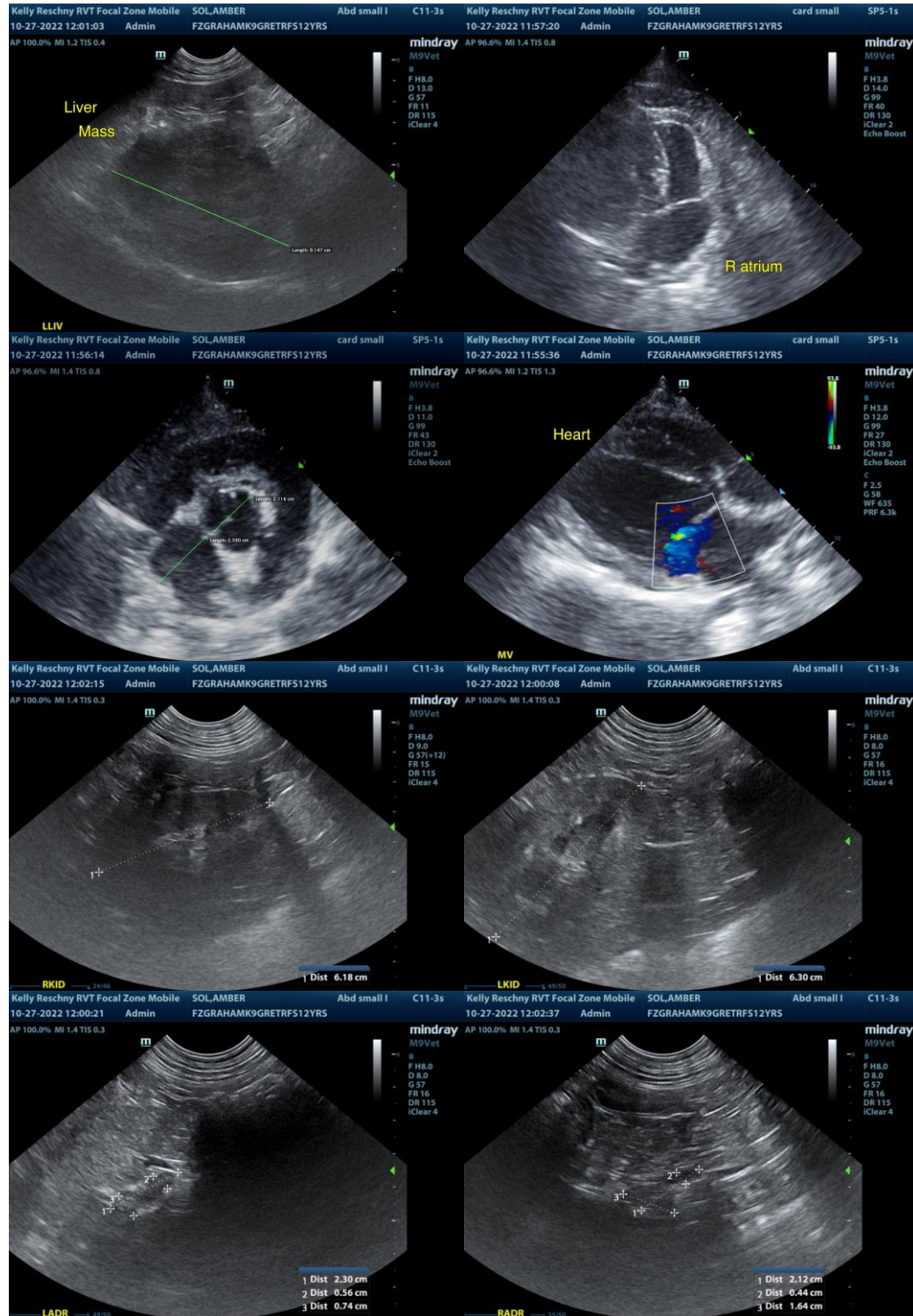
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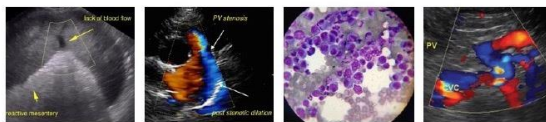
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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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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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info@SonoPath.com

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