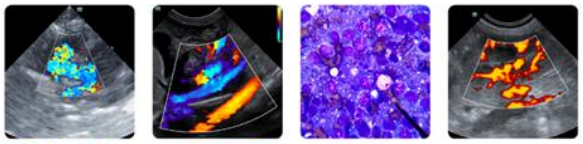

PATIENT

Bo Brookhart

SPECIES

Feline

BREED

DSH

SEX

MN

AGE

14.5yr

WEIGHT

8.62lb

INTERPRETED BY

R. McKenzie Daniel, DVM, DABVP (Canine and Feline)

IMAGING PERFORMED BY

Dr. Jocelyn Hollway

HOSPITAL NAME

Valley Green Veterinary Hospital

REFERRING VET

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INVOICE
25032`

DATE
06/08/2026

PRESENTING CLINICAL SIGNS

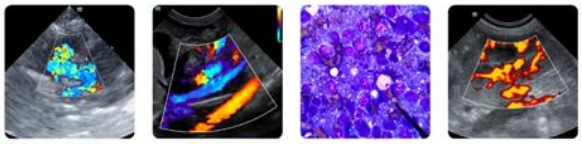
Has been ravenous at home and losing weight but otherwise acting normal. No C/S/V/D. Came for bloodwork recently because O wanted to check P's PL. PE was declined at the time. On the BW, NEW hyperthyroidism and severe elevation in spec fPL were identified. Owner was worried that Patient wasn't urinating but O(m) notes Patient is urinating in a different box than usual.
BP - avg 158mmHg
ECG - tachycardia, otherwise NSF
6/4/2026
CBC:
Mono 0.525 HIGH
Eos 1.861 HIGH
CHEMISTRY:ALP = 102 HIGH Lytes: NSFT4 = 5.5 HIGH (0.8-4.7) --> NEW hyperthyroidism Feline Triple SNAP = (-)x3proBNP = 24 NSF Spec fPL = 50 EXTREMELY HIGH (0-4.4)Urinalysis sample collected via: cystocentesis1.0337pH1+ protein otherwise quiet sediment with no evidence of UTI Reflex UPC Ratio = 0.3 --> proteinuria CXR to IDX for review = pending
Abnormal PE/Chem/CBC/UA Results: BAR. Uncomfortable with ABD palpation. Lip licking/hard swallowing. NO obvious masses palpable. Regular rhythm; no obv murmur detected. Harsh lung sounds bilaterally. NO obvious crackles or increased RE. Front declawed; weight stable despite poor appetite - epaxial muscle wasting. Prior full mouth extractions.

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN AND HEART

FELINE CARDIAC PARAMETERS	**BODY WEIGHT**	**HR** (BPM)	**IVSd** (cm)	**LVIDd** (cm)	**LVWd** (cm)	**FS** (%)	**EF** (%)
NORMAL PARAMETER	------	150-240	0.3-0.6	1.0-2.1	0.25-0.6	35-67	80-100
PATIENT	8.62lb	NM	0.46	1.45	0.44	45	81
FELINE CARDIAC PARAMETERS	**LA/AO** M-Mode	**LA/AO HEART BASE** (Sisson)	**LAD** LA MAX 4 Chamber		**LVOT VEL.** (m/s)	**RVOT VEL.** (m/s)	**IVRT** (m/)
NORMAL PARAMETER	<1.5	1.6	0.7-1.7		<1.6	<1.3	40-60
PATIENT	--	1.45	1.4		1.0	0.5	NM
Sisson D et al. JVIM 1991; 5: 232, Jacobs et al. Am J Vet Res 1985; 46:1705							

Cardiac Presentation

The echocardiogram in this patient demonstrated normal left atrial size based on 2 separate LA measurements. The cranial and caudal mitral valve leaflets presented normal linear structure and kinetics. No overt MR present on Doppler. The left ventricle presented normal thicknesses with linear contour and was not dilated nor restricted. The myocardium presented normal echogenicity without subjective evidence of significant fibrotic or ischemic disease. The 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 and angles of the myocardium. The left ventricular outflow tract demonstrated normal laminar flow and subjective structural integrity. Normal measured LVOT velocity was present. The right atrium and auricle revealed normal size,



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structure and content. No evidence of masses was noted or chamber overload. Tricuspid valvular assessment demonstrated adequate linear morphology and kinetics. No overt TR present on Doppler. 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). Normal measured RVOT velocity was present. No visible pericardial or free pleura fluid was noted or extra cardiac pathology in the visible planes. The cranial mediastinum and pericardial regions were free of masses in the visible window.

Urinary System

The urinary bladder, trigone, cystourethral junction, and visible pelvic urethra to a depth of - cm exhibited normal thickness and tone. Anechoic urine was present in the lumen with non-dependent particulate to hyperechoic sediment. The ureteral papillae were normal. The ureters were not visible which is normal. No evidence of inflammatory or neoplastic changes was noted.

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 3.9 cm in length. The right kidney measured 4.6 cm in length.

The area of the aortic trifurcation was free of pathology.

Adrenal Glands

The left adrenal gland was uniform in size and contour with a uniformly hypoechoic parenchyma. The left adrenal gland measured 0.34 cm width. The right adrenal gland was not definitively visualized, no overt pathology in the area of the right adrenal gland.

Spleen

The spleen was asymmetrically enlarged exhibiting asymmetrical to rounded lateral and medial capsule contour and maintained homogenous parenchyma. No visualized masses or nodules were present. The spleen measured 1.6 cm width at the mid spleen.

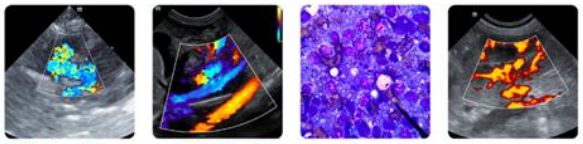
Liver/Gallbladder

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. Normal vascular volume. The hepatic and portal vasculature were normal in appearance without signs of congestion. The gallbladder was non-distended in size with thin walls and primarily anechoic luminal content. The cystic and common bile ducts were normal.

Gastrointestinal

The stomach presented intact wall layering with a normal wall layer ratio. The lumen of the stomach contained moderate variably echogenic non-shadowing ingesta sonographically suggestive of food echogenicity with no signs of obstruction or foreign material.

The small intestine presented intact mildly thickened wall with normal to mildly altered wall layer ratio owing to propensity for mildly prominent mucosa and segmental muscularis layer. Segmental mild increased intestinal mucosa echogenicity. The duodenum wall measured 0.33 cm width. The jejunum wall measured 0.30 cm width. The ileocolic wall measured 0.33 cm width.



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

Pancreas

The left and right pancreas were mild prominent in size, with capsule asymmetry and non-homogenous hypoechoic parenchyma compared to adjacent mildly hyperechoic peripancreatic omentum.

Free Abdomen

No omental masses, overt lymphadenopathy or peritoneal effusion was present.

ULTRASONOGRAPHIC FINDINGS

Primary

- Normal cardiac structure/function
- Gastrointestinal ingesta- most consistent with food echogenicity
- Intact mildly thickened small intestinal wall with mild segmental increased mucosa echogenicity
- Chronic active pancreatitis pattern
- Mild chronic renal changes
- Urine sediment
- Asymmetrical splenomegaly

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

No evidence of HCM criteria or other structural cardiomyopathy. Monitoring of HR given tachycardia on ECG suggested.

Although non-specific, considerations for the small intestine may include IBD or other inflammatory enteropathy with occult intestinal neoplasia, i.e. lymphoma is thought less likely yet not definitively excluded. Assessment for cranial abdomen or subxiphoid discomfort on palpation which may correlate with chronic active pancreatitis is suggested. A GI panel to include PLI/TLI/Cobalamin/Folate is recommended.

Monitoring of hepatic enzymes for evidence of hepatobiliary inflammation which may be associated with hyperthyroidism or may potentially indicate possible triaditis is recommended. Correlation with thoracic radiographs and monitoring of proteinuria if non-inflammatory sediment is suggested.

If stable hyperthyroidism with continued gastrointestinal signs or weight loss, sonographic monitoring or potential intestinal biopsies for histopathology may be indicated.

Splenic hyperplasia, hematopoiesis, sedation if clinically applicable, inflammation or emerging to occult splenic round cell neoplasia possible. If patient was non-sedated with appropriate clotting status, splenic FNA cytology using 25ga needle is recommended.

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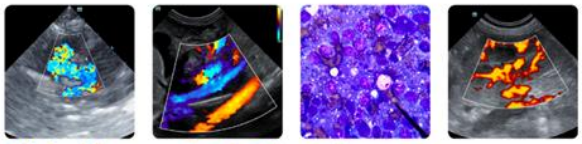

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Educational Teleconsultation Services™

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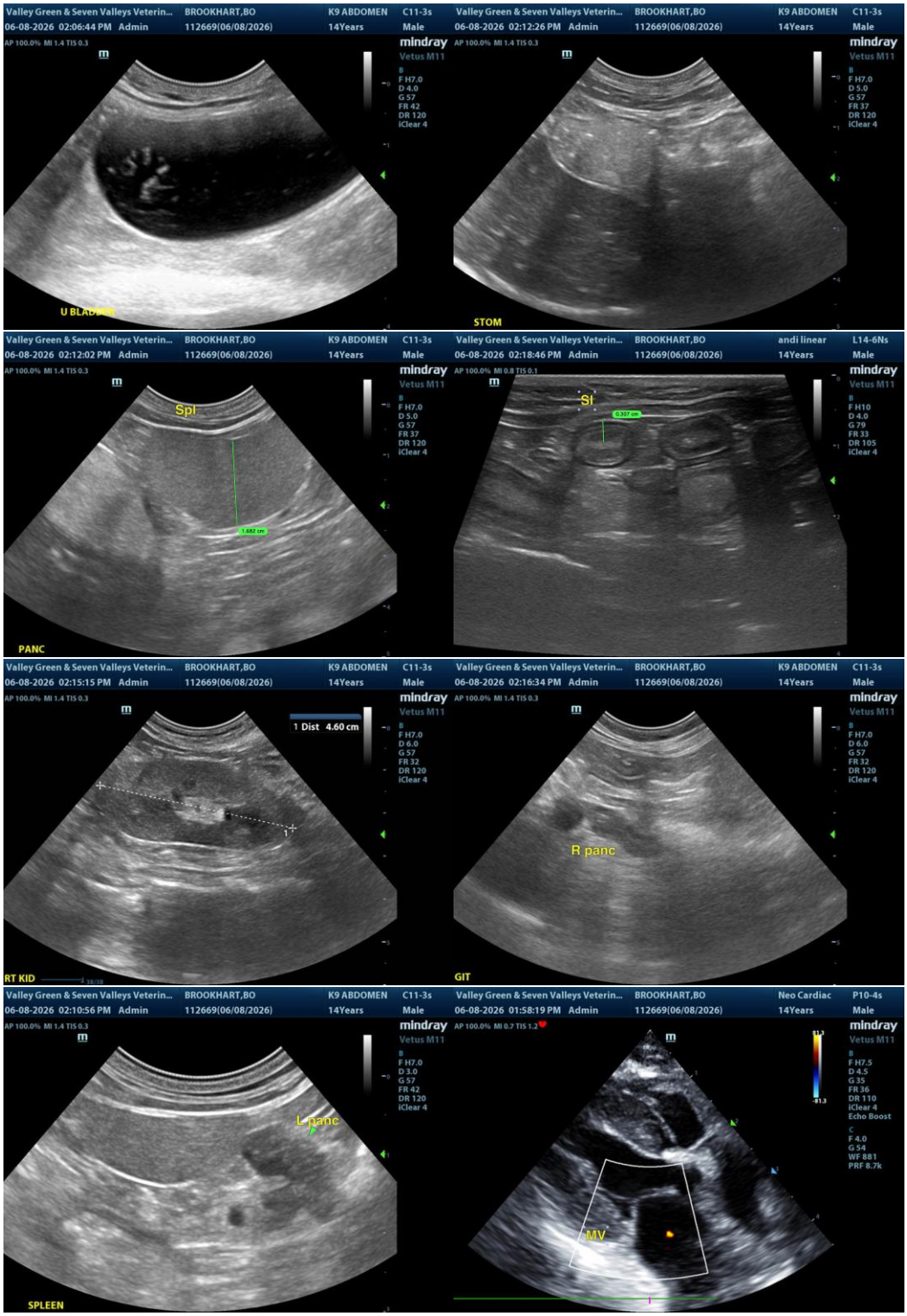

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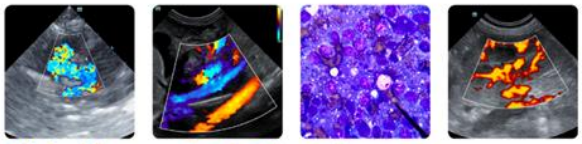

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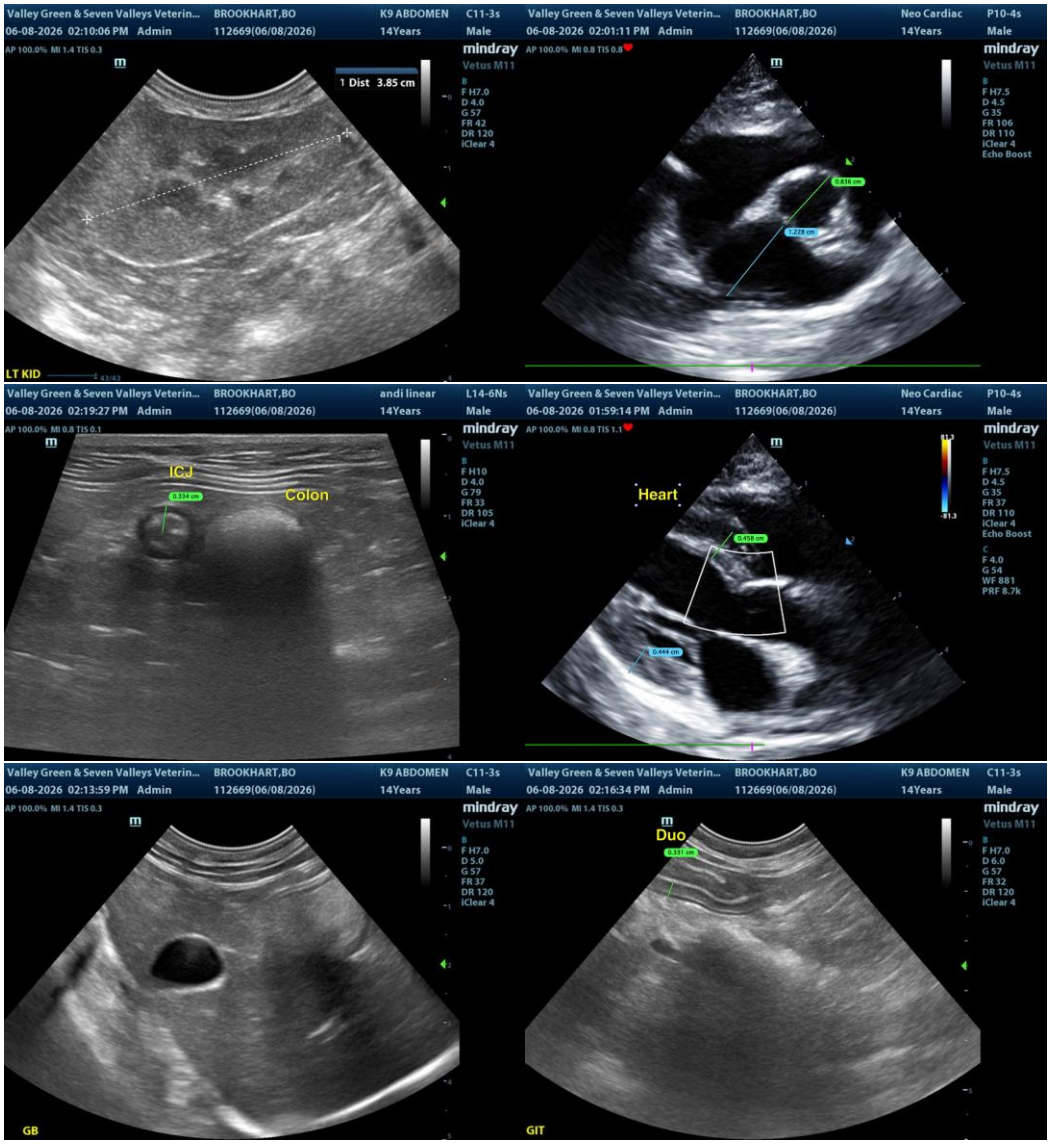

The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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