


**PATIENT**

April Bailey

**PRESENTING CLINICAL SIGNS**

Loose stool - stool is coming out ribbon shaped, hepatomegaly, blood work unremarkable. R/O neoplasia vs. other.

**SPECIES**

Canine

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

West Highland White

**SEX**

FS

**AGE**

13yr

**WEIGHT**

22lb

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	<1.3	28-40	40-100	<0.6
PATIENT		3.0	1.1	1.3	35.8	68.7	0.23
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	NM	1.7	1.2		2.8	2.6	

**INTERPRETED BY**

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

**IMAGING PERFORMED BY**

Kelly Vazquez

**HOSPITAL NAME**

 Ringwood Animal  
 Hospital

**REFERRING VET**

Dr. DeSpirito

**Cardiac Presentation**

The echocardiogram in this patient demonstrated normal left atrial size based on 3 different LA measurement methods. The cranial and caudal mitral valve leaflets presented vegetative thickening consistent with endocardiosis. Doppler indicated mild 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. Mild to moderate aortic insufficiency on Doppler measuring 3 m/s. The right atrium and auricle revealed borderline prominent size with normal structure and content. No evidence of masses was noted or chamber overload. Tricuspid valvular assessment demonstrated mild thickening with mild 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). Trace pulmonic insufficiency present on Doppler. No visible pericardial or free pleura fluid was noted. No echographically detectable evidence of infiltrative disease was visible. 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 2 cm exhibited normal thickness and tone. Mild asymmetrical luminal surface to micropolyploid changes were present likely associated with age related mural changes. 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 were noted.

**INVOICE**

11413ag

**DATE**

08/19/2022



<b>PATIENT</b>	Normal size and margination was 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 4.2 cm in length. The right kidney measured 4.6 cm in length.
April Bailey	
<b>SPECIES</b>	The area of the aortic trifurcation was free of pathology.
Canine	
<b>BREED</b>	<b>Adrenal Glands</b>
West Highland White	The left adrenal gland was uniform in size and contour with a uniformly hypoechoic parenchyma. The left adrenal gland measured 0.43 cm width at the caudal pole and 1.7 cm length.
<b>SEX</b>	The right adrenal gland was mildly prominent in size with indistinct nodular parenchyma and minor capsule asymmetry. The right adrenal gland measured 0.84 cm width at the caudal pole and 2.7 cm length
FS	<b>Spleen</b>
<b>AGE</b>	The spleen exhibited primarily finely textured parenchyma which was hyperechoic to the liver and renal cortical parenchyma. Mild generalized parenchyma heterogeneity was present without evidence of nodular changes. 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. The parenchymal heterogeneity is likely consistent with benign changes such as extramedullary hematopoiesis or age related remodeling with minor potential for inflammatory or neoplastic disease.
13yr	
<b>WEIGHT</b>	<b>Liver</b>
22lb	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.
<b>INTERPRETED BY</b>	The gallbladder was non-distended in size with thin walls and mild congealed hyperechoic debris-not consistent with mucocele. The cystic and common bile ducts were normal.
R. McKenzie Daniel, DVM, DABVP (Canine and Feline)	<b>Gastrointestinal</b>
<b>IMAGING PERFORMED BY</b>	The stomach presented intact wall layering with a normal wall layer ratio. The lumen of the stomach was empty with no signs of ileus, obstruction or foreign material.
Kelly Vazquez	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>HOSPITAL NAME</b>	The descending colon exhibited moderate to variable thickened wall with decreased echogenicity and loss of wall layering detail. The descending colon wall measured up to 0.85 cm in width. A cystic lesion associated with the descending colon wall measuring 1.8 cm in diameter was present.
Ringwood Animal Hospital	<b>Pancreas</b>
<b>REFERRING VET</b>	The pancreas was normal in size and contour with isoechoic to heterogeneous parenchyma compared to adjacent omentum. No signs of active inflammation or neoplasia.
Dr. DeSpirito	<b>Free Abdomen</b>
<b>INVOICE</b>	No peritoneal effusion was present.
11413ag	
<b>DATE</b>	
08/19/2022	



**PATIENT**

April Bailey

Intermittent mildly prominent to enlarged medial iliac and mesenteric lymph nodes were present. The lymph nodes were essentially isoechoic to adjacent omentum without evidence of peripheral inflammation and maintaining a normal width: length ratio (<0.5).

**SPECIES**

Canine

**ULTRASONOGRAPHIC FINDINGS**

- Chronic mitral valve disease (ACVIM B1)
- TR-est pulmonary pressure gradient ~ 27 mmHg
- Aortic insufficiency
- Trace pulmonic insufficiency
- Thickened descending colon/colorectal with loss of wall layer detail and non-specific mural cystic lesion-severe chronic colitis with concern for mural neoplastic criteria
- Intermittent medial iliac and mesenteric lymphadenopathy
- Mild chronic renal changes
- Irregular to nodular right adrenal gland-adenomatous changes, potential for emerging neoplastic criteria i.e. pheochromocytoma, adenocarcinoma

**BREED**

West Highland White

**SEX**

FS

**AGE**

13yr

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

The lack of LA enlargement indicates that the risk of complication is low. Prognosis is highly variable and serial sonographic monitoring is required for further assessment. No indication for cardiac medications. A recheck echocardiogram suggested in 6 months, sooner if clinical signs arise.

**WEIGHT**

22lb

Endoscopic biopsies of the thickened descending colon wall would be ideal for definitive diagnosis. Tissue C/S +/- FISH may be indicated in addition to colon histopathology. Empirical therapy for colitis which may include enrofloxacin trial and sonographic monitoring would be a more conservative approach.

**INTERPRETED BY**

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

Systemic BP is suggested to assess for hypertension which may allude to a right pheochromocytoma given right adrenal appearance and aortic insufficiency.

**IMAGING PERFORMED BY**

Kelly Vazquez

**HOSPITAL NAME**

Ringwood Animal  
Hospital

**REFERRING VET**

Dr. DeSpirito

**INVOICE**

11413ag

**DATE**

08/19/2022



**PATIENT**

April Bailey

**SPECIES**

Canine

**BREED**

West Highland White

**SEX**

FS

**AGE**

13yr

**WEIGHT**

22lb

**INTERPRETED BY**

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

**IMAGING PERFORMED BY**

Kelly Vazquez

**HOSPITAL NAME**

Ringwood Animal  
Hospital

**REFERRING VET**

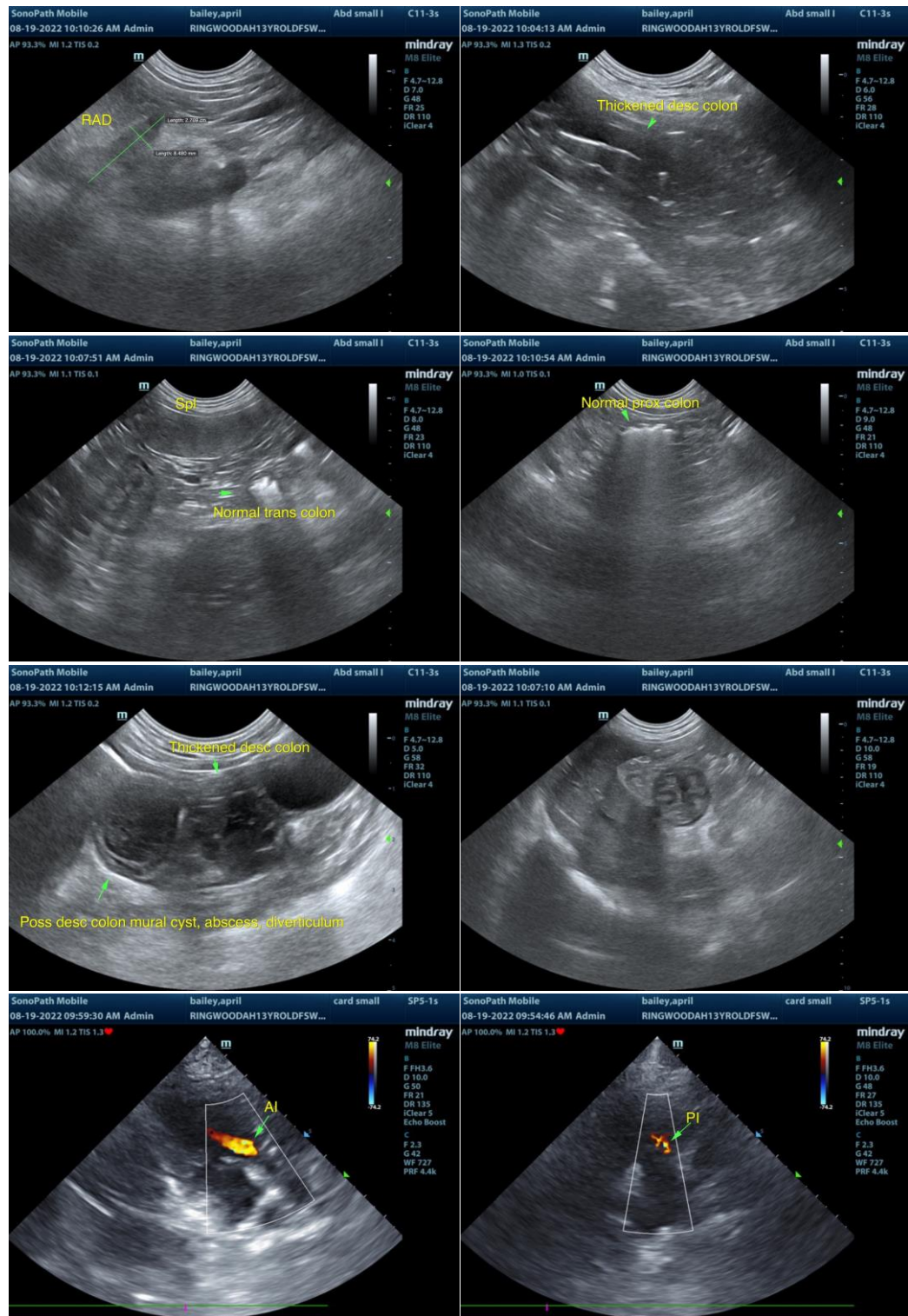
Dr. DeSpirito

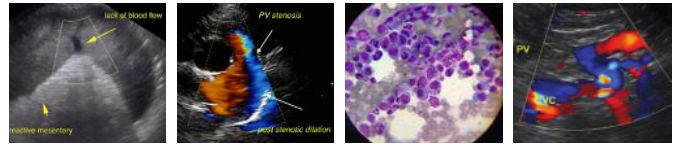
**INVOICE**

11413ag

**DATE**

08/19/2022





**PATIENT**

April Bailey

**SPECIES**

Canine

**BREED**

West Highland White

**SEX**

FS

**AGE**

13yr

**WEIGHT**

22lb

**INTERPRETED BY**

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

**IMAGING PERFORMED BY**

Kelly Vazquez

**HOSPITAL NAME**

Ringwood Animal  
Hospital

**REFERRING VET**

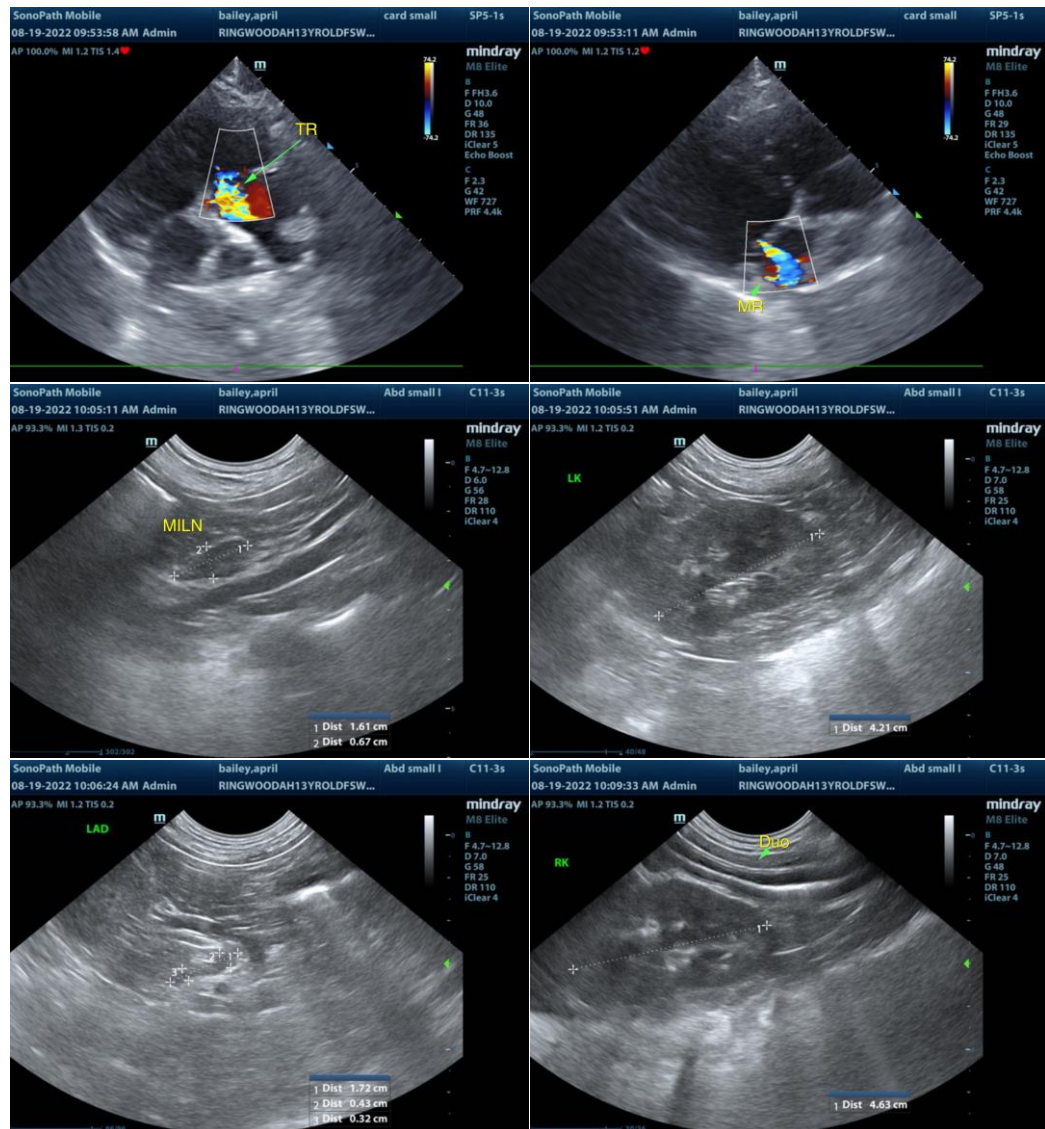
Dr. DeSpirito

**INVOICE**

11413ag

**DATE**

08/19/2022



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.

R. McKenzie Daniel, DVM, DABVP (Canine / Feline Practice)

info@SonoPath.com