

PATIENT

Isabelle Bishop

SPECIES

Canine

BREED

Australian Kelpie
Mix

SEX

FS

AGE

11 y/o

WEIGHT

40.6 lbs.

INTERPRETED BY

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

IMAGING PERFORMED BY

Dr. Ackmann

HOSPITAL NAME

Buffalo Veterinary
Clinic

REFERRING VET

Dr. Bessler

INVOICE

10433

DATE

12/9/25

PRESENTING CLINICAL SIGNS

History of chronic diarrhea. Stool became more pudding like after metronidazole and forti-flora. Still eating fine and no vomiting. Lost 4 pounds since appointment on 11/19/25.

Abnormal PE/Chem/CBC/UA Results: Gallop heart rhythm not as prominent. Abdomen palpates normal. Dx performed 11/19/25: CBC mild elevation in WBC and neutrophils. Chem low albumin 1.5, TP 4 and Ca 5 corrected 7.0 (7.9) Rads show gas in colon, SI, no mass effect, no pleural or abdominal effusion. Lungs clear, Heart base on right later litter thicker. Fast scan U/S no abdominal effusion, some sludge in GB Ddx. protein losing enteropathy, caused by IBD, GI infection, cancer, lymphatic compromise, right sided CHF. Tx: started 500 mg metronidazole BID x 7. Also started on 250 mg calcium carbonate BID, could start on calcitriol 100 mg BID.

ULTRASONOGRAPHIC EXAMINATION OF THE HEART & ABDOMEN

CANINE CARDIAC PARAMETERS	MR VMAX (m/s)	TR VMAX (m/s)	LA/AO (M-Mode)	LA/AO (Heart Base; Swe)	FS (%)	EF (%)	EPSS (cm)
NORMAL PARAMETER	4.5-5.5	<2.7	1.3	Up to 1.6	28-40	40-100	<0.6
PATIENT				1.15	44	76	0.3
CANINE CARDIAC PARAMETERS	HR (BPM)	AV VMAX (m/s)	PV MAX (m/s)	BODY WEIGHT (kg)	LAD LA MAX 4 Chamber	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	1.0	0.6		3.4	3.2	

Cardiac Presentation

The echocardiogram in this patient demonstrated normal **left atrial** size based on 2 different LA measurement methods. Chamber volumes and echogenicity were normal. The cranial and caudal **mitral** valve leaflets presented thickening consistent with endocardiosis. Doppler indicated moderate 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. The **right ventricle** was of



PATIENT	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 detectable evidence of cardiac / pericardial tumors was visible.
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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 evidence of urine or lumen sediment, mineral, or calculi. The ureteral papillae were normal. The ureters were not visible which is normal. No evidence of inflammatory or neoplastic changes was noted.

No evidence of pathology in the area of the aortic trifurcation.

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 5.9 cm in length. The right kidney measured 5.9 cm in length.

Adrenal Glands

The left adrenal gland was uniform in size and contour with a uniformly hypoechoic parenchyma. The left adrenal gland measured 0.67 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 0.65 cm width at the caudal pole.

Spleen

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.

Liver/ Gallbladder

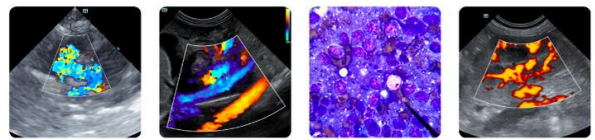
The liver was subjectively normal in size, structure, and contour. Normal hepatic vascular volume was present. The liver parenchyma was uniform and hypoechoic to the spleen with a mild coarse echotexture. The hepatic and portal vasculature were normal in appearance without signs of congestion. The gallbladder was non-distended in size with thin walls and primarily anechoic luminal content. The cystic and common bile ducts were normal. No evidence of gallbladder wall edema.

Gastrointestinal

The stomach presented intact wall layering with a normal wall layer ratio. The lumen of the stomach was empty without evidence of retained ingesta, fluid, or foreign material.



PATIENT	The small intestine presented intact mildly thickened wall layering, exhibiting generalized mild thickened intestinal mucosa. Segmental, mild hyperechoic intestinal mucosal speckling to indistinct mucosal fogging was noted to the level of the colon.
Isabelle Bishop	
SPECIES	Normal intact visible colon wall. The colon contained non-formed to soft fecal matter.
Canine	Pancreas
BREED	The area of the pancreas was sonographically normal.
Australian Kelpie Mix	Free Abdomen
SEX	Generalized mild omental hyperechogenicity was noted. Mild volume peritoneal effusion was present. No obvious significant omental lymphadenopathy was visualized.
FS	ULTRASONOGRAPHIC FINDINGS
AGE	<ul style="list-style-type: none"> • Compensated mitral valve insufficiency (B1) • PLE intestinal pattern • Non formed to soft fecal matter in colon • Generalized mild hyperechoic omentum and mild peritoneal effusion • Normal volume liver • Normal bilateral kidneys / adrenal glands
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R. McKenzie Daniel, DVM, DABVP (Canine and Feline)	INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS
IMAGING PERFORMED BY	IBD or other inflammatory enteropathy, lymphangiectasia, infiltrative intestinal disease, i.e., neoplasia / fungal are all potentials. A GI panel to include PLI/TLI/Cobalamin/Folate is recommended.
Dr. Ackmann	
HOSPITAL NAME	There is no evidence of cardiomyopathy as a contributing factor. Cardiac prognosis is variable and echocardiographic monitoring is advised. Recheck echocardiogram is recommended in 6-12 months, sooner if clinically indicated.
Buffalo Veterinary Clinic	
REFERRING VET	Some or all of the following protocol may be considered empirically. Intestinal biopsies are required for a definitive diagnosis yet contraindicated if albumin level 2.0 or less.
Dr. Bessler	
INVOICE	OBJECTIVE: keep albumin levels > 2 g/dl, avoid thromboembolism and cavitory effusions, monitor concurrent PLN (Wheaton Terrier PLE/PLN) and liver disease:
10433	Plasma 10 mL / kilogram IV over 4 hours
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12/9/25	And Colloids/Hetastarch 10 to 20 mL per kilogram per day and dogs



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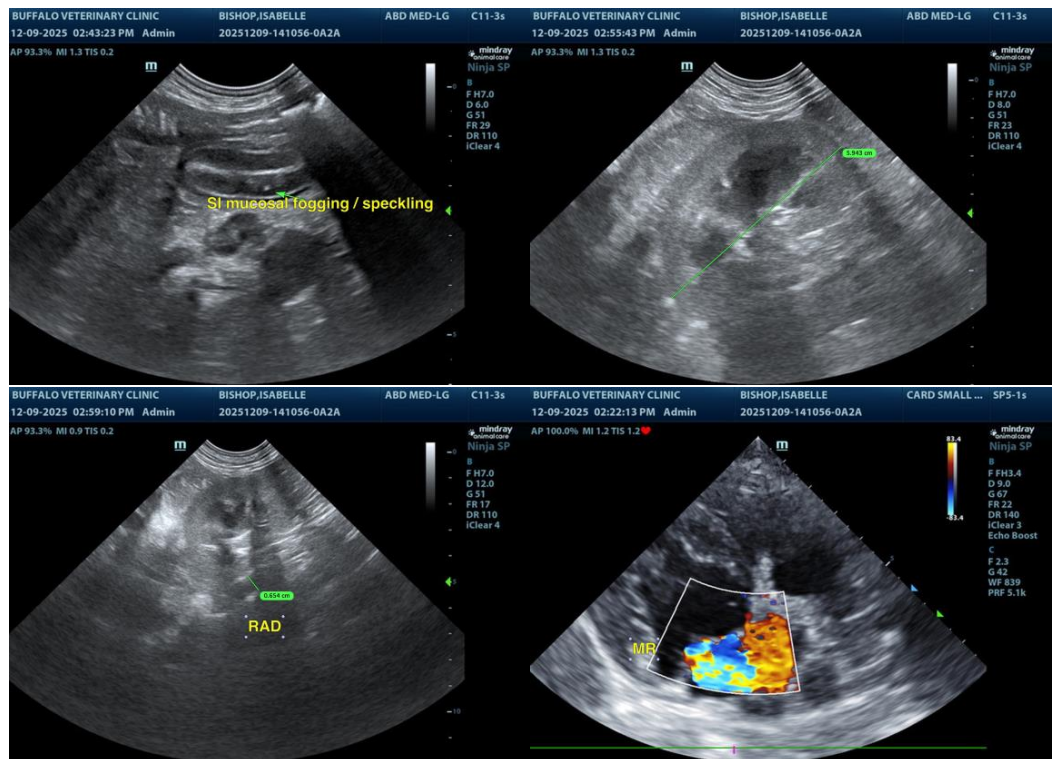
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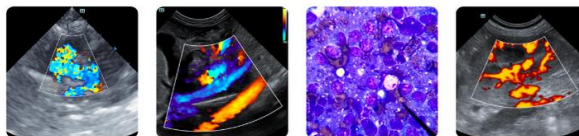
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10 to 15 mL per kilogram per day cats
(Can bolus first 1/3 of dose over 15 minutes)
& maintain on LRS maintenance otherwise.
High colony count probiotic such as **Provable**
Famotidine 1 mg/kg Iv Im po dc Sid /bid
Sucralfate 0.5-1 g po tid dogs, 0.5 g bid cats in slurry **Or Misoprostol** 1-5 ug/kg po tid
Diet: Highly digestible high quality protein, low fiber, low fat diet (< 15% of dry matter). Hydrolyzed protein or novel protein. Purina HA or Royal Canine HP or similar.
Prednisone or prednisolone 2 mg/kg bid x 3-5 days then 2 mg/kg sid. **Chlorambucil** in refractive severe IBD/alimentary lymphoma cases (monitor cbc for rare bone marrow suppression) 4 mg/m² Q 24-48 hours.
Cobalamine (B12) 250-1500 ug/dog weekly x 6 weeks.
Calcium supplementation if necessary.
Aspirin 0.5-1 mg/kg/day **or Clopidrel** (Plavix) 1-5 mg/kg/day.





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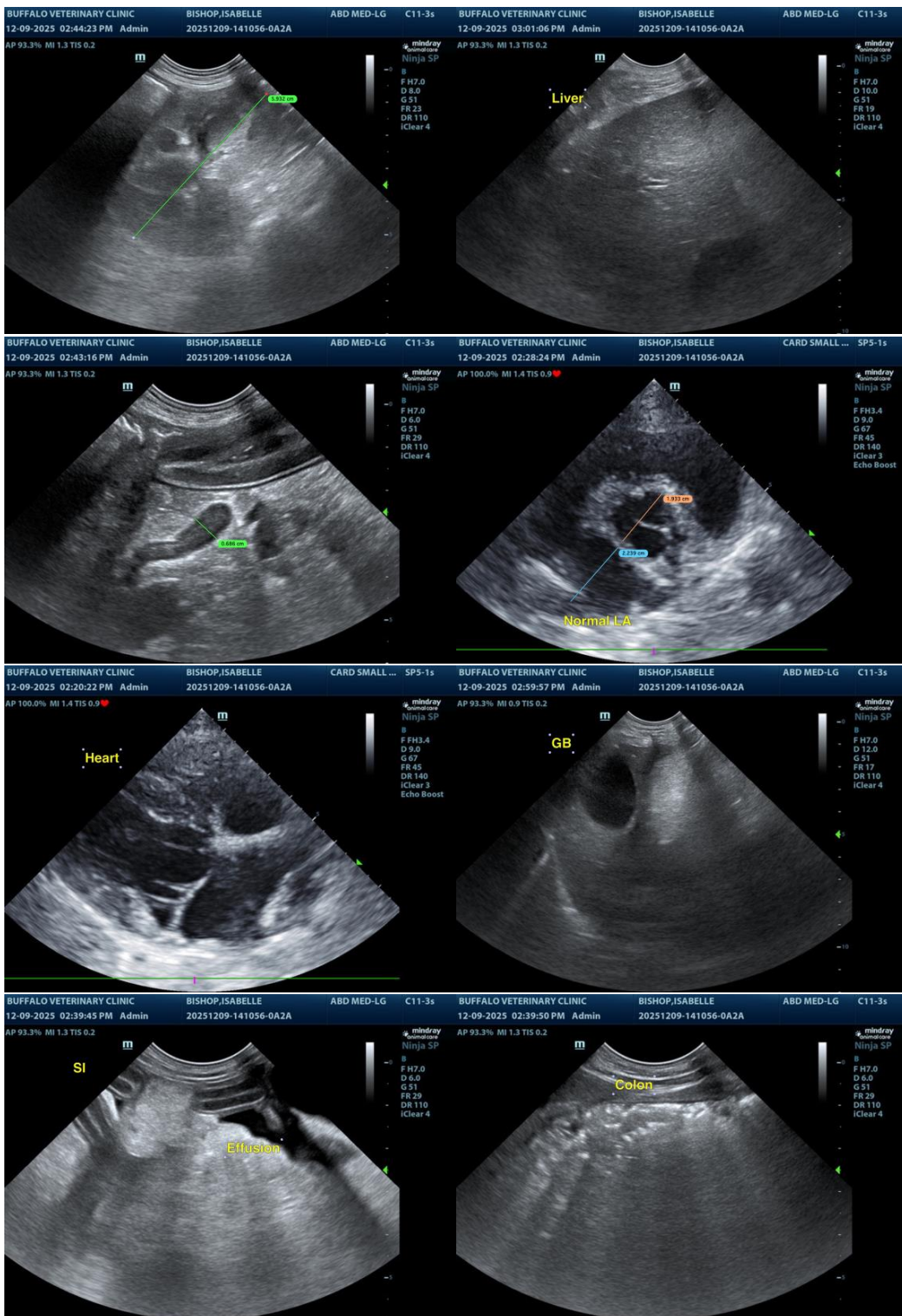
Dr. Bessler

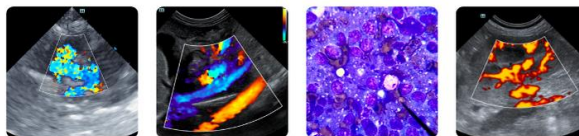
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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.

R. McKenzie Daniel, DVM, DABVP (Canine/Feline Practice)
info@sonopath.com