



PATIENT PRESENTING CLINICAL SIGNS

Bandit Hutton
 History: Dog has been off for 10 days, decreased appetite, vomiting occasionally, increased respirations, radiographs show large mass in caudal ventral lung field. Aspirate pending.
 Abnormal PE/Chem/CBC/UA Results: WBC=29.78, neuts=26.65, chem=wnl

SPECIES

Canine

ULTRASONOGRAPHIC EXAMINATION OF THE HEART & ABDOMEN

BREED

Australian Shepherd

SEX

Neutered Male

AGE

12 Years

WEIGHT

61 Pounds

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	--	--	NM	1.4	44.1	78.8	0.2
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	1.1	1.0	--	3.8	3.4	--

INTERPRETED BY

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

IMAGING PERFORMED BY

Nicole Gotfredson

HOSPITAL NAME

Buffalo VC

REFERRING VET

Garry Gotfredson,
 DVM

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17124

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9/1/22

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 visualized extra-cardiac regions** were free of overt masses in the visible window.

Urinary System

The urinary bladder, trigone, cystourethral junction, and visible pelvic urethra to a depth of 2.0 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 were noted.



PATIENT

The area of the iliac trifurcation was free of pathology, including no evidence of medial iliac or sublumbal lymphadenopathy/masses.

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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 6.0 cm in length. The right kidney measured 7.2 cm in length.

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Adrenal Glands

Australian Shepherd

The left and right adrenal glands were not definitively visualized. No obvious evidence of pathology in the area of the left and right adrenal glands.

SEX

Spleen

Neutered Male

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.

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Liver

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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 minor parenchymal remodeling. Normal hepatic vascular volume was noted with no evidence of hepatic congestion. No masses or nodules noted.

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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.

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Gastrointestinal

The stomach exhibited intact yet mildly prominent wall layering. The lumen of the stomach was empty with no signs of ileus, obstruction or foreign material. The ventral gastric body wall measured 0.64 cm.

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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. The small intestinal wall measured 0.39 cm in width.

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

Pancreas

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The pancreas was normal in size and contour with isoechoic to heterogeneous parenchyma compared to adjacent omentum. No signs of active inflammation or neoplasia.

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Free Abdomen

No omental masses, lymphadenopathy or evidence of significant peritoneal free fluid was present.

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ULTRASONOGRAPHIC FINDINGS



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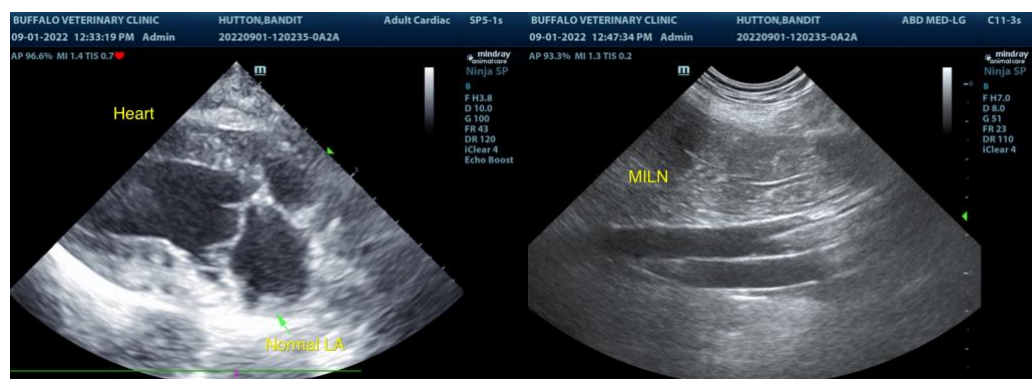
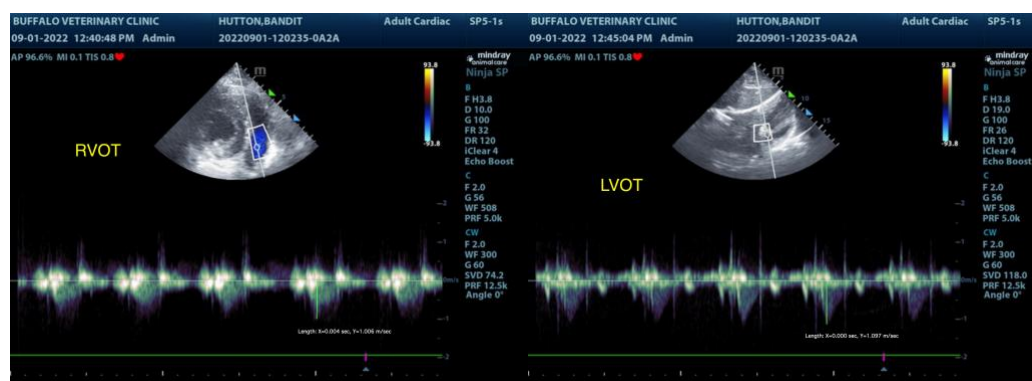
- Overtly normal cardiac structure and function
- Intact yet mildly thickened stomach, sonographically unremarkable small bowel
- Mild hepatosplenic parenchymal changes
- Heterogeneous pancreas- age-related variant suspected. Minor potential for remodeling owing to previous inflammation or low grade to chronic pancreatitis possible
- Mild chronic renal changes

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

No evidence of structural or functional cardiomyopathy. No indication for cardiac medications.

Largely mild geriatric abdomen without evidence of significant abdominal visceral pathology.

Potential for mild gastritis, given the decreased appetite and vomiting in this patient is possible without overt evidence of gastric or gastrointestinal neoplastic criteria. The mass reported in the caudoventral lung field was not definitively visualized. Correlation with pending cytology is recommended. No evidence of primary intraabdominal neoplastic criteria or tumors as a potential cause of thoracic or pulmonary metastatic disease. As needed gastrointestinal supportive care and therapy for possible gastritis would be appropriate.





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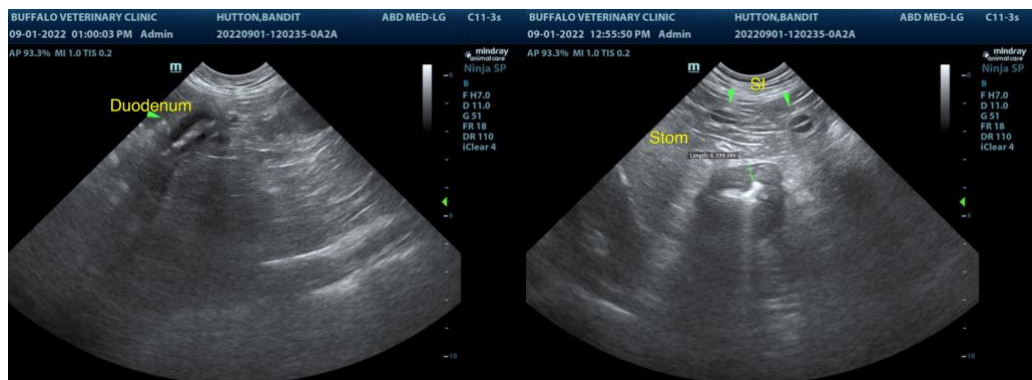
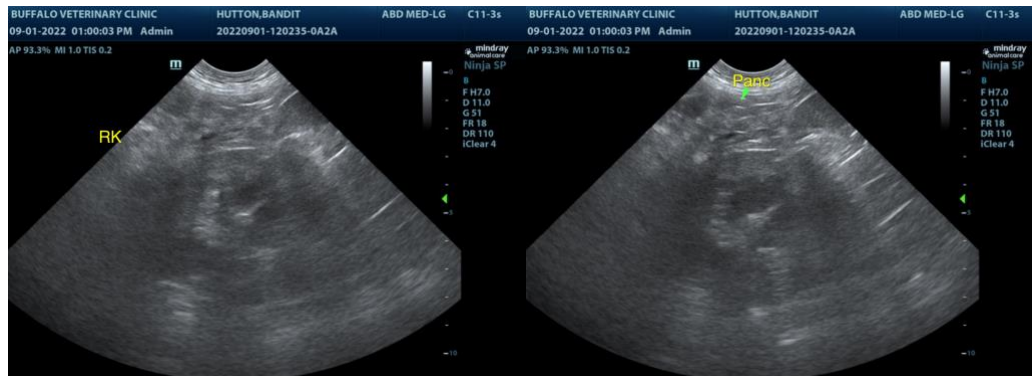
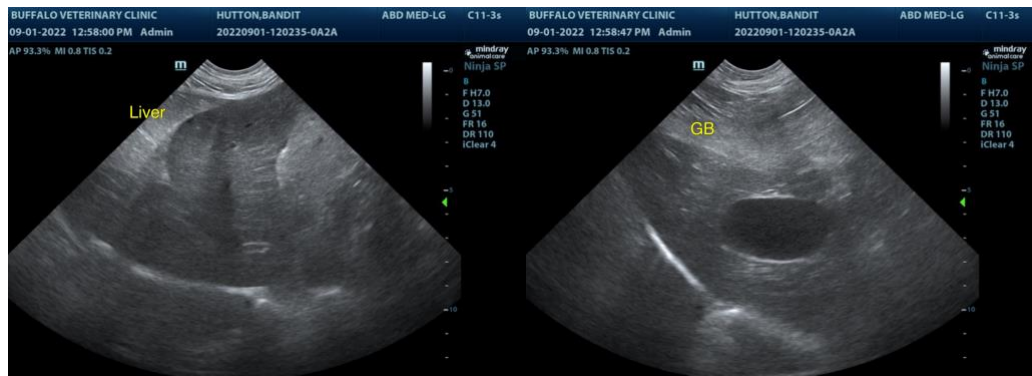
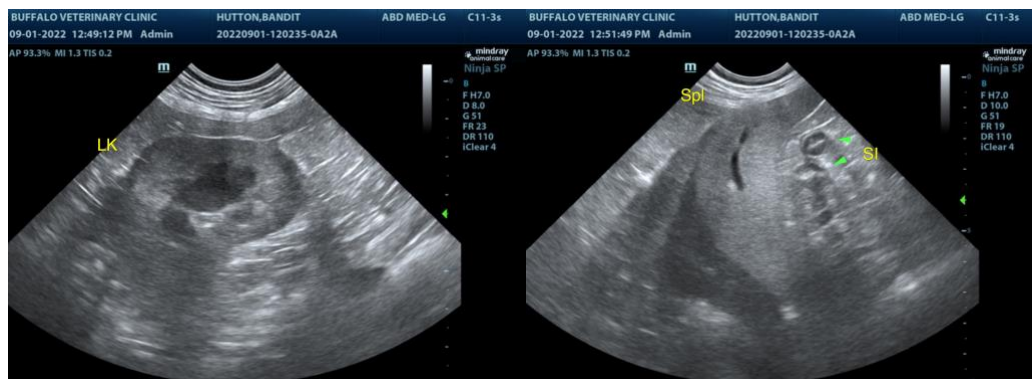
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The information and recommendations provided are based on the images presented by the



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referring veterinarian. 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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