


**PATIENT**

Iris Trudeau

**PRESENTING CLINICAL SIGNS**

Probable LSA, on pred and lasix. Had chest effusion in past. WBC 45K, left shift, mono 3.5% HCT ok. 2nd opinion.

**SPECIES**

Feline

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

DSH

**SEX**

FS

**AGE**

12

**WEIGHT**

8

FELINE CARDIAC PARAMETERS	BODY WEIGHT (kg)	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		NM	0.40	1.77	0.40	39.5	75
FELINE CARDIAC PARAMETERS	LA/AO (Boon)	LA/AO HEART BASE (Sisson)	LA 2D 4-chamber long axis AS to FW (Sisson) (cm)	LVOT VEL. (m/s)	RVOT VEL. (m/s)	IVRT (m/)	
NORMAL PARAMETER	<1.5	0.88-1.79	0.7-1.7	<1.6	<1.3	40-60	
PATIENT		1.45	1.4	NM	NM		

Adapted from June Boon, Veterinary Echocardiography, 1998  
 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 3 separate LA measurements. The cranial and caudal mitral valve leaflets presented normal linear structure and kinetics. 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. The right atrium and auricle revealed normal size, structure and content. Tricuspid valvular assessment demonstrated adequate linear morphology and kinetics. 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). Minor volume free pleural fluid was present with potential for very scant pericardial free fluid. Pericardial, thoracic or possible mediastinal mass exhibiting mild non-uniform hypoechoic echogenicity and measuring ~ 4 cm in diameter was present.

**Urinary System**

The urinary bladder, trigone, cystourethral junction, and visible pelvic urethra to a depth of 2 cm exhibited normal thickness and tone. Anechoic urine was present in the lumen with dependent mineral/small calculus. The ureteral papillae were normal. The ureters were not visible which is normal. No evidence of inflammatory or neoplastic changes were 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

**INTERPRETED BY**

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

**IMAGING PERFORMED BY**

Hunt

**HOSPITAL NAME**

 Bayshore Veterinary  
 Hospital

**REFERRING VET**

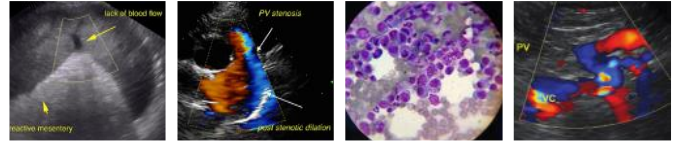
Hunt

**INVOICE**

12887ag

**DATE**

02/05/2023



<b>PATIENT</b>	of pelvic dilation was present. The left kidney measured 4.0 cm in length. The right kidney measured 4.5 cm in length.
Iris Trudeau	The area of the aortic trifurcation was free of pathology.
<b>SPECIES</b>	<b>Adrenal Glands</b>
Feline	The left and right adrenal glands were not definitively visualized. No obvious pathology was present in the area of the bilateral adrenal glands.
<b>BREED</b>	<b>Spleen</b>
DSH	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.
<b>SEX</b>	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. The spleen measured 0.93 cm in width at the level of the hilus.
FS	<b>Liver/Gallbladder</b>
<b>AGE</b>	The liver was enlarged in size with rounded symmetrical capsule contour and generalized mild non-uniform hyperechoic parenchyma with moderate coarse echotexture. No overt or definitive hepatic mass. 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.
12	
<b>WEIGHT</b>	<b>Gastrointestinal</b>
8	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.
<b>INTERPRETED BY</b>	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.
R. McKenzie Daniel, DVM, DABVP (Canine and Feline)	Normal visible colon wall layers were present with apparent formed feces in lumen.
<b>IMAGING PERFORMED BY</b>	<b>Pancreas</b>
Hunt	The pancreas was variably prominent in size exhibiting asymmetrical contour and non-homogenous nodular parenchyma with a cyst in the proximal left pancreatic limb measuring 1.2 cm in diameter.
<b>HOSPITAL NAME</b>	<b>Free Abdomen</b>
Bayshore Veterinary Hospital	Scant peritoneal free fluid present primarily around the liver.
<b>REFERRING VET</b>	Intermittent non-specific mildly irregular to non-homogenous mesenteric lymph nodes were present, an example measured 1.3 cm in diameter.
Hunt	<b>ULTRASONOGRAPHIC FINDINGS</b>
<b>INVOICE</b>	<ul style="list-style-type: none"> <li>• Overtly normal cardiac structure and function</li> <li>• Thoracic/mediastinal mass</li> <li>• Focal dependent urinary bladder mineral/small calculus</li> <li>• Hepatomegaly with non-uniform parenchyma hyperechogenicity-vacuolar hepatopathy, inflammatory/immune mediated disease, hematopoiesis, hyperplasia, lipidosis, fibrosis or infiltrative neoplasia all potentials</li> <li>• Non-homogenous nodular to cystic pancreas</li> </ul>
12887ag	
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**PATIENT**

Iris Trudeau

- Sonographically unremarkable GI tract
- Mild chronic renal changes
- Intermittent mild to irregular mesenteric lymph nodes

**SPECIES**

Feline

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

Assuming normal clotting status and using a 25g needle, a thoracic/mediastinal mass and liver FNA for screening cytology is warranted for further assessment. Recheck retroviral status could be considered if not recently done.

**BREED**

DSH

The mild bicavitary effusion appears to be non-cardiogenic in origin given lack of overt structural or functional cardiomyopathy. An extremely guarded prognosis is warranted pending sampling.

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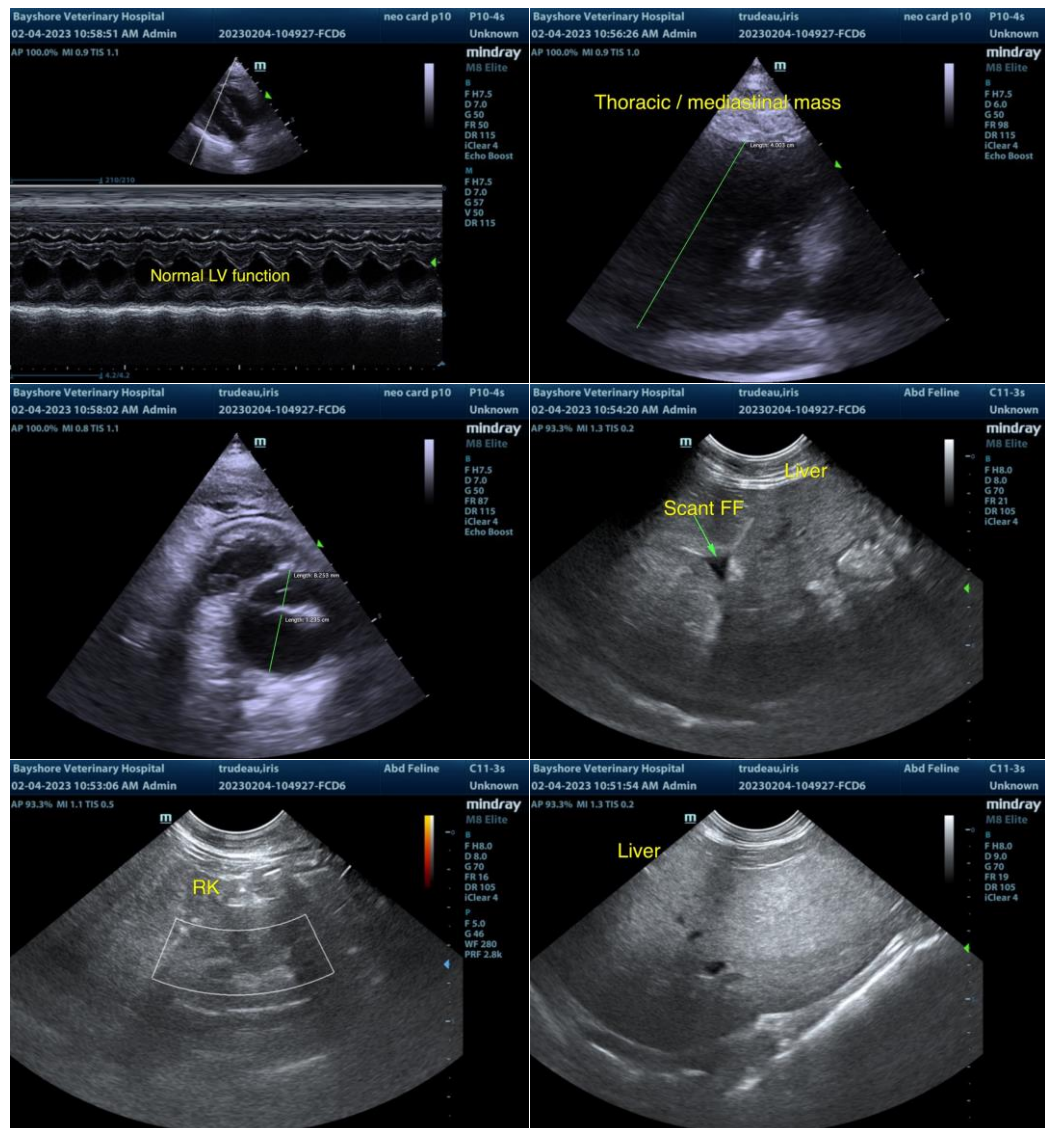
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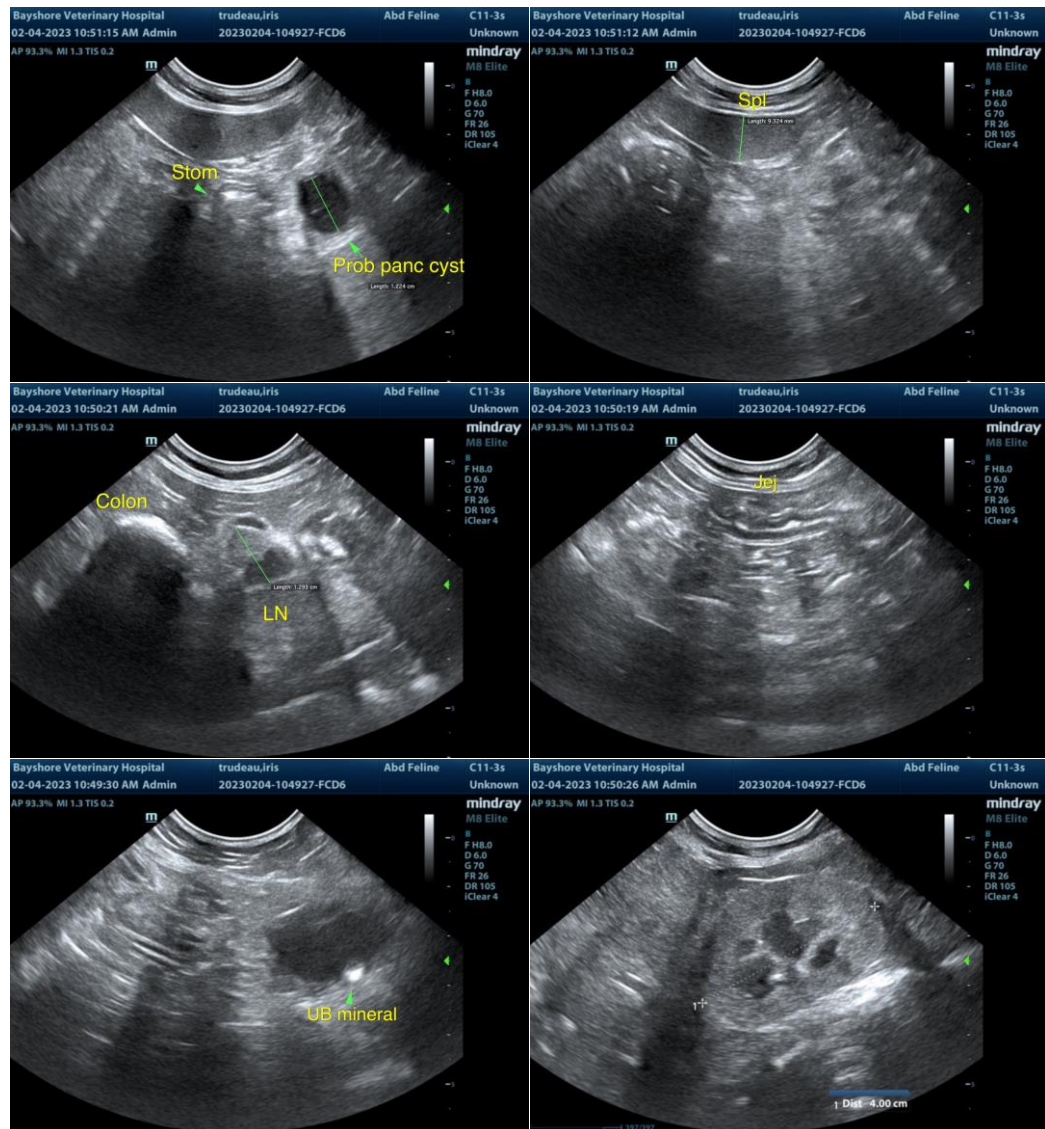
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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.

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