



PATIENT

Eepers Salvini

SPECIES

Feline

BREED

DSH

SEX

FS

AGE

14 years

WEIGHT

7.5 lbs.

INTERPRETED BY

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

IMAGING PERFORMED BY

Jessica Miller

HOSPITAL NAME

Martinsville VH

REFERRING VET

Dr. Shendell

INVOICE

15933

DATE

1/25/23

PRESENTING CLINICAL SIGNS

2 year history of gradual weight loss. Possible mass vs FB seen on Rad Sept 2022. Weekly vomiting. 2/6 L parasternal murmur on PE

Abnormal PE/Chem/CBC/UA Results: Retic Hgb 15/1, WBC 26.7, Lymph 13.19, Mono 1.068, SDMA 15, Creat 1.8, TCO2 23

ULTRASONOGRAPHIC EXAMINATION OF THE HEART & ABDOMEN

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		2.0	0.57	1.2	0.53	54	87
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		1.4	1.3	1.2	0.8	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. No overt MR was noted 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. **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, structure and content. No evidence of masses was noted or chamber overload. **Tricuspid** valvular assessment demonstrated adequate linear morphology and kinetics. No overt TR was noted 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. No visible **pericardial** or free



PATIENT

Eepers Salvini

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.

SPECIES

Feline

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 was noted.

BREED

DSH

The area of the aortic trifurcation was free of pathology.

SEX

FS

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

AGE

14 years

WEIGHT

7.5 lbs.

Adrenal Glands

The left adrenal gland was uniform in size and contour with a uniformly hypoechoic parenchyma. The left adrenal gland measured 0.39 cm width. The right adrenal gland was uniform in size and contour with a uniformly hypoechoic parenchyma. The right adrenal gland measured 0.52 cm width.

INTERPRETED BY

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

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. The spleen measured 0.8 cm width at the level of the hilus.

IMAGING PERFORMED BY

Jessica Miller

Liver/ Gallbladder

HOSPITAL NAME

Martinsville VH

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. A thinly walled cyst was present in the deep mid to right liver containing anechoic fluid measuring 1.6 cm in diameter. The gallbladder was non-distended in size with thin walls and primarily anechoic luminal content. The cystic and common bile ducts were normal.

REFERRING VET

Dr. Shendell

INVOICE

15933

Gastrointestinal

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.

DATE

1/25/23

The small intestine presented intact wall layering and maintained a 1:3 muscularis/mucosa ratio with segmental propensity for subtly prominent muscularis layer, yet without evidence of intestinal mural hypertrophy, loss of intestinal wall layering, or intestinal masses. The duodenum wall measured 0.24 cm width. The jejunum wall measured 0.20 cm width. The ileocolic wall measured 0.31 cm width.



PATIENT

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

Eepers Salvini

SPECIES

Pancreas

Feline

The pancreas was normal in size with asymmetrical contour and mildly hypoechoic parenchyma compared to adjacent omentum.

BREED

Free Abdomen

DSH

Intermittent, mesenteric lymphadenopathy was present. The lymph nodes were mildly prominent and essentially isoechoic to adjacent omentum without evidence of peripheral inflammation and maintaining a normal width: length ratio (<0.5). No effusion or omental masses were noted.

SEX

FS

ULTRASONOGRAPHIC FINDINGS

AGE

14 years

- Normal echocardiogram
- Bilateral chronic renal changes
- Minor hepatic parenchymal remodeling with benign intraparenchymal cyst
- Chronic enteropathy with associated mild benign mesenteric lymphadenopathy
- Suspect mild chronic active pancreatitis

WEIGHT

7.5 lbs.

INTERPRETED BY

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

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

No evidence of structural or functional cardiomyopathy, assuming no evidence of volume changes such as dehydration or anemia, a benign physiologic flow murmur appears to be present without evidence of significant valvular insufficiencies, stenotic disease, LV systolic dysfunction, HCM criteria, or evidence of clinical pulmonary hypertension. No indication for cardiac medications. Conservative monitoring of the murmur is recommended with recheck echocardiogram suggested in 6-12 months, sooner if murmur intensity increases.

IMAGING PERFORMED BY

Jessica Miller

HOSPITAL NAME

Martinsville VH

No overt evidence of intraabdominal neoplastic criteria or masses. Suspect chronic inflammatory enteropathy / IBD with low-grade chronic active pancreatitis. Potential for Triad Disease may be possible if previous hepatic enzyme elevations. Further assessment may include a GI panel to include PLI/TLI/Cobalamin/Folate. Three-view chest radiographs and thorough muscular/skeletal/neurological examination are suggested to rule out occult disease as contributing factors.

REFERRING VET

Dr. Shendell

INVOICE

15933

DATE

1/25/23



PATIENT

Eepers Salvini

SPECIES

Feline

BREED

DSH

SEX

FS

AGE

14 years

WEIGHT

7.5 lbs.

INTERPRETED BY

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

IMAGING PERFORMED BY

Jessica Miller

HOSPITAL NAME

Martinsville VH

REFERRING VET

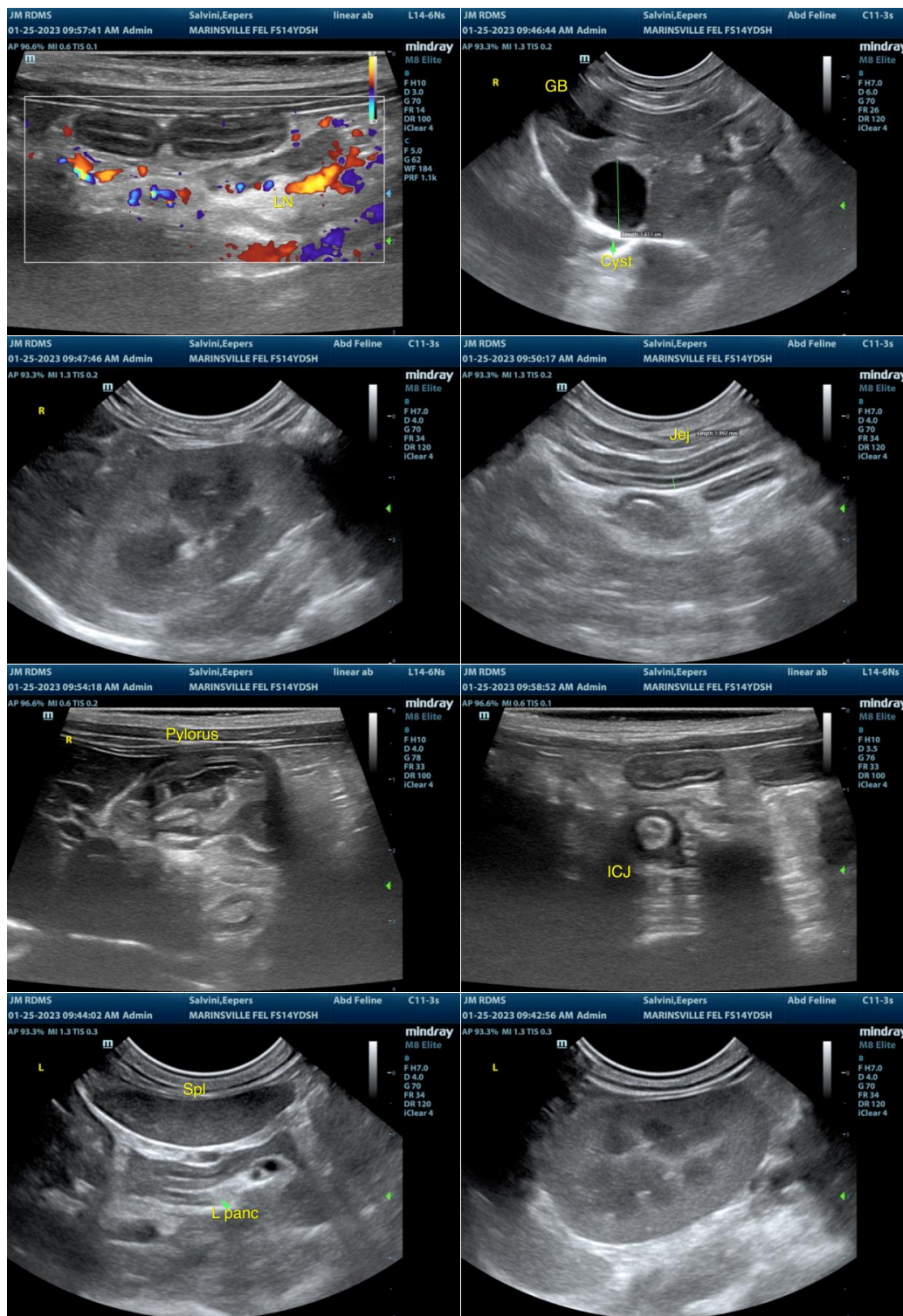
Dr. Shendell

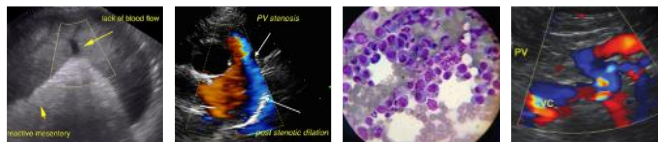
INVOICE

15933

DATE

1/25/23





PATIENT

Eepers Salvini

SPECIES

Feline

BREED

DSH

SEX

FS

AGE

14 years

WEIGHT

7.5 lbs.

INTERPRETED BY

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

IMAGING PERFORMED BY

Jessica Miller

HOSPITAL NAME

Martinsville VH

REFERRING VET

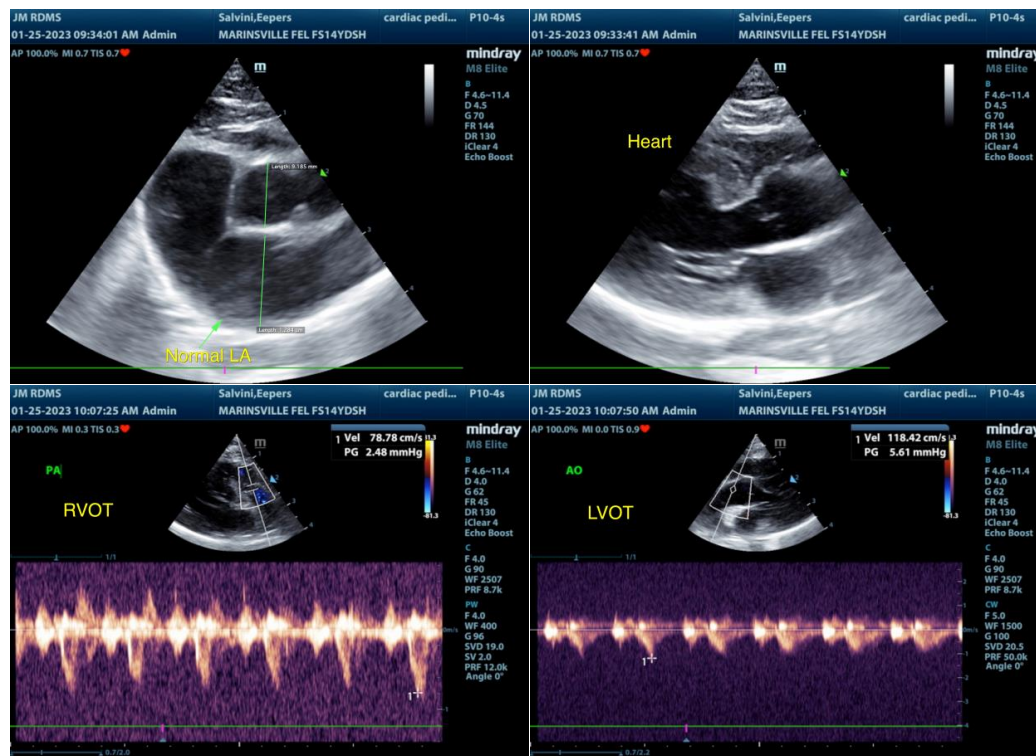
Dr. Shendell

INVOICE

15933

DATE

1/25/23



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