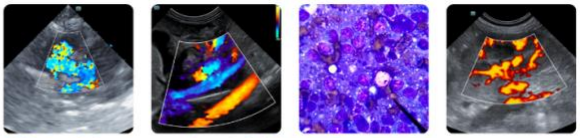


PATIENT

Tuna Mandrona

SPECIES

Feline

BREED

Siamese

SEX

Neutered Male

AGE

11 Years

WEIGHT

14.3 lbs

INTERPRETED BY

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

IMAGING PERFORMED BY

Chloe Lowe, CVT

HOSPITAL NAME

Animal Hospital of Sussex County

REFERRING VET

Dr. Mandrona

INVOICE

16562

DATE

05/29/26

PRESENTING CLINICAL SIGNS

Lethargic, fever 104.7, dragging right hind leg. Low grade murmur 1/6 r/o HCM.

Chest rads- VHS 8.6 (normal up to 8). Pulmonary bronchial pattern. T4 1.4, Lym 0.29, Alt 122, phos 2.8, Glu 178, K 3.6

ULTRASONOGRAPHIC EXAMINATION OF THE HEART & ABDOMEN

FELINE CARDIAC PARAMETERS	**BODY WEIGHT**	**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	14.3 lbs	NM	0.6	1/55	0.6	45	78
FELINE CARDIAC PARAMETERS	**LA/AO** (M-mode)	**LA/AO HEART BASE** (Sisson)	**LAD** LA MAX 4 Chamber		**LVOT VEL.** (m/s)	**RVOT VEL.** (m/s)	**IVRT** (m/)
NORMAL PARAMETER	<1.5	1.6	0.7-1.7		<1.6	<1.3	40-60
PATIENT	1.3	1.3	1.3		1.4	1.0	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 and structure with no evidence of “smoke” or thrombi. The cranial and caudal **mitral** valve leaflets appeared mildly thickened with minor insufficiency noted on Doppler. The **left ventricle** presented borderline increased free wall and septal thicknesses. The **myocardium** presented essentially normal echogenicity without immediate signs of fibrotic or ischemic disease. **Contractility** of the ventricular walls was considered excessive for this patient evidenced by the elevated fractional shortening measurement. The **left ventricular outflow** tract demonstrated turbulent laminar flow. Subjective assessment of the **right atrium** and auricle revealed normal size, structure and content. No evidence of masses was noted. **Tricuspid** valvular assessment demonstrated linear morphology. The **right ventricle** was of normal size with normal chordae structure, myocardial echogenicity and thickness. **Pulmonic** tract assessment revealed normal valve structure, laminar flow, and diameter. No visible **pericardial** or free pleura fluid was noted. No echographically detectable evidence of infiltrative disease was visible. The **mediastinum** was free of masses in the visible window.

Urinary System

The urinary bladder, trigone, cystourethral junction, and visible pelvic urethra exhibited normal thickness and tone. Primarily anechoic urine was present in the lumen. Echogenic to particulate nondependent mild sediment was present without evidence of calculus formation. The ureteral papillae were normal. The ureters were not visible which is normal. No evidence of inflammatory or neoplastic mural changes were noted.

PATIENT

Tuna Mandrona

SPECIES

Feline

BREED

Siamese

SEX

Neutered Male

AGE

11 Years

WEIGHT

14.3 lbs

INTERPRETED BY

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

IMAGING PERFORMED BY

Chloe Lowe, CVT

HOSPITAL NAME

Animal Hospital of Sussex County

REFERRING VET

Dr. Mandrona

INVOICE

16562

DATE

05/29/26

Sonographic assessment of the aorta and iliac vasculature revealed no overt aortic or iliac thrombus with subjective normal laminar vascular flow on Doppler.

Normal size and margination was present in the kidneys. A normal 1:3 cortex / medulla ratio was maintained. Mildly hyperechoic cortex echogenicity with enhanced corticomedullary border demarcation. The left kidney measured 4.2 cm in length. The right kidney measured 4.6 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 0.42 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 0.44 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. 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.

Gastrointestinal

The stomach presented intact wall layering with a normal wall layer ratio. The lumen of the stomach contained mild retained anechoic fluid without obstruction to pyloric outflow.

The intestinal walls demonstrated intact wall layering and maintained 1:3 muscularis / mucosa ratio. A mild segmental ileus pattern is present without obstruction or foreign material. The duodenum wall measured 0.22 cm wall width. The jejunum wall measured 0.21 cm wall width.

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

Pancreas

The parenchyma of the left limb, body and right limb of the pancreas presented isoechoic to the adjacent omental fat. A normal curvilinear capsule contour of the pancreas was present. The visible pancreatic duct was normal. No signs of active inflammation or neoplastic disease was evident.

Free Abdomen

No overt lymphadenopathy or peritoneal effusion was present.

ULTRASONOGRAPHIC FINDINGS

PATIENT

Tuna Mandrona

SPECIES

Feline

BREED

Siamese

SEX

Neutered Male

AGE

11 Years

WEIGHT

14.3 lbs

INTERPRETED BY

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

IMAGING PERFORMED BY

Chloe Lowe, CVT

HOSPITAL NAME

Animal Hospital of Sussex County

REFERRING VET

Dr. Mandrona

INVOICE

16562

DATE

05/29/26

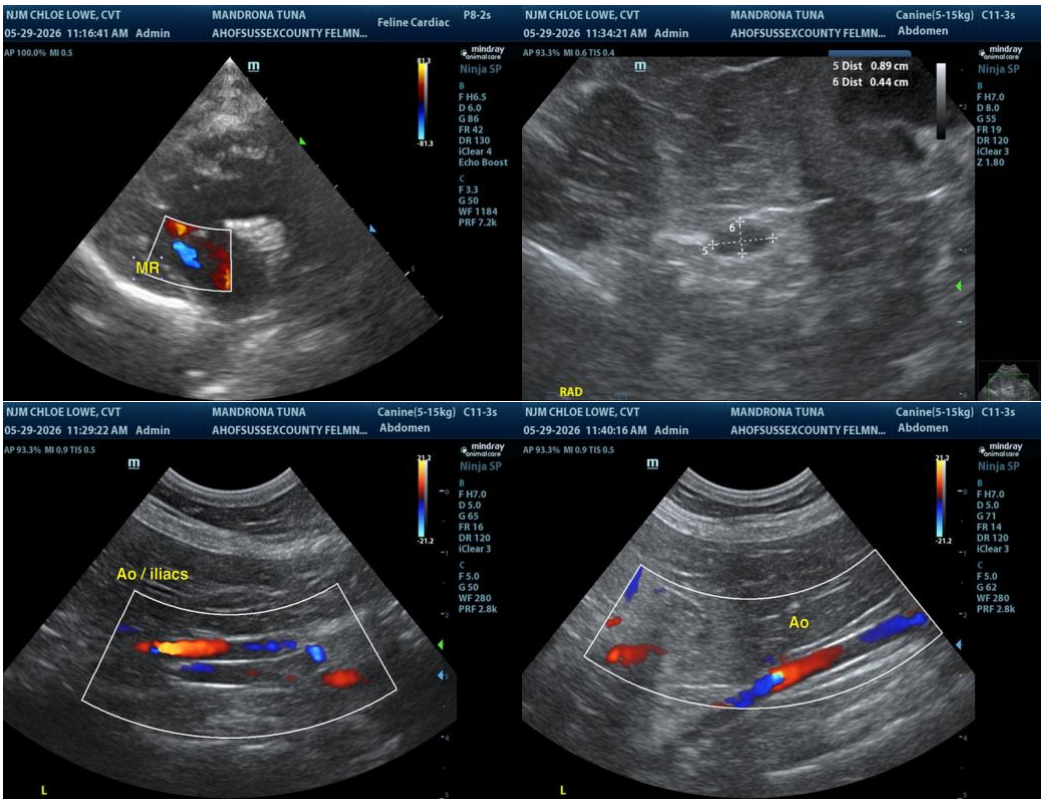
- Borderline increased LV thickness with normal LA- no evidence of LA thrombus or smoke.
- Mild urine sediment.
- Mild chronic renal changes.
- Normal gastrointestinal tract with mild nonobstructive gastrointestinal ileus.
- Sonographically unremarkable aorta and iliac vasculature with subjective normal blood flow.
- Sonographically normal liver/gallbladder- consistent with low-grade benign hepatopathy.

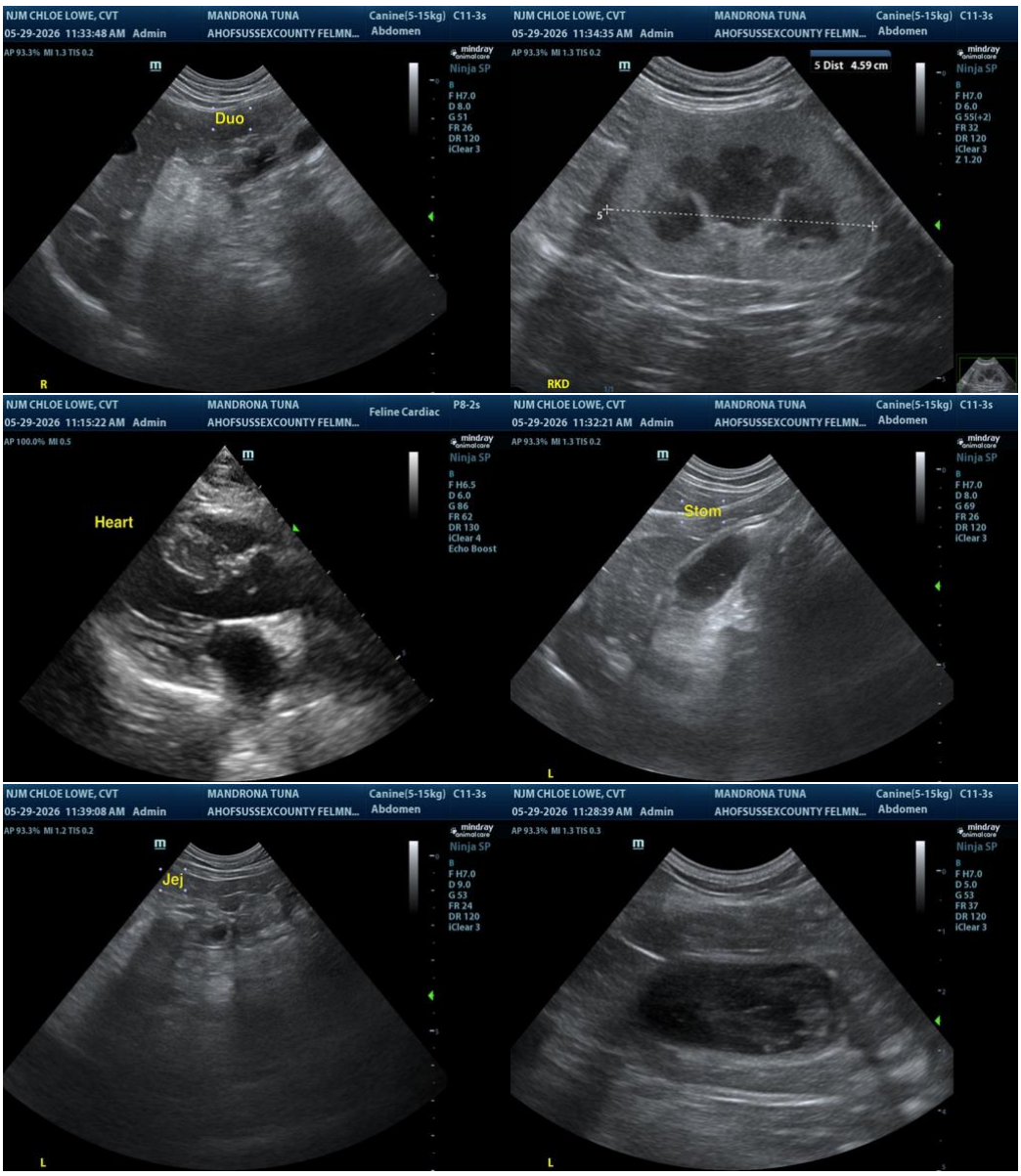
INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

The borderline increased LV wall thickness may indicate early HCM phenotype, which is a rule-out diagnosis once the patient is deemed euthyroid and normotensive. Regardless of classification, the lack of LA enlargement indicates that the current and future risk of complication is low and although a thrombotic event cannot be definitively excluded, appears unlikely based on current cardiac exam. A benign flow murmur is considered probable, although a small non-visible flow abnormality is not excluded. Likewise, the hemodynamic effects of the murmur appear low.

No indication for cardiac medication. A non-cardiogenic or non-visible vascular event within the right leg may be possible. Definitive diagnosis would likely require advanced imaging such as CT with contrast.

Supportive care is recommended with consideration for referral. Urine culture and sensitivity is recommended if inflammatory sediment on urinalysis.





PATIENT

Tuna Mandrona

SPECIES

Feline

BREED

Siamese

SEX

Neutered Male

AGE

11 Years

WEIGHT

14.3 lbs

INTERPRETED BY

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

IMAGING PERFORMED BY

Chloe Lowe, CVT

HOSPITAL NAME

Animal Hospital of Sussex County

REFERRING VET

Dr. Mandrona

INVOICE

16562

DATE

05/29/26

PATIENT

Tuna Mandrona

SPECIES

Feline

BREED

Siamese

SEX

Neutered Male

AGE

11 Years

WEIGHT

14.3 lbs

INTERPRETED BY

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

IMAGING PERFORMED BY

Chloe Lowe, CVT

HOSPITAL NAME

Animal Hospital of Sussex County

REFERRING VET

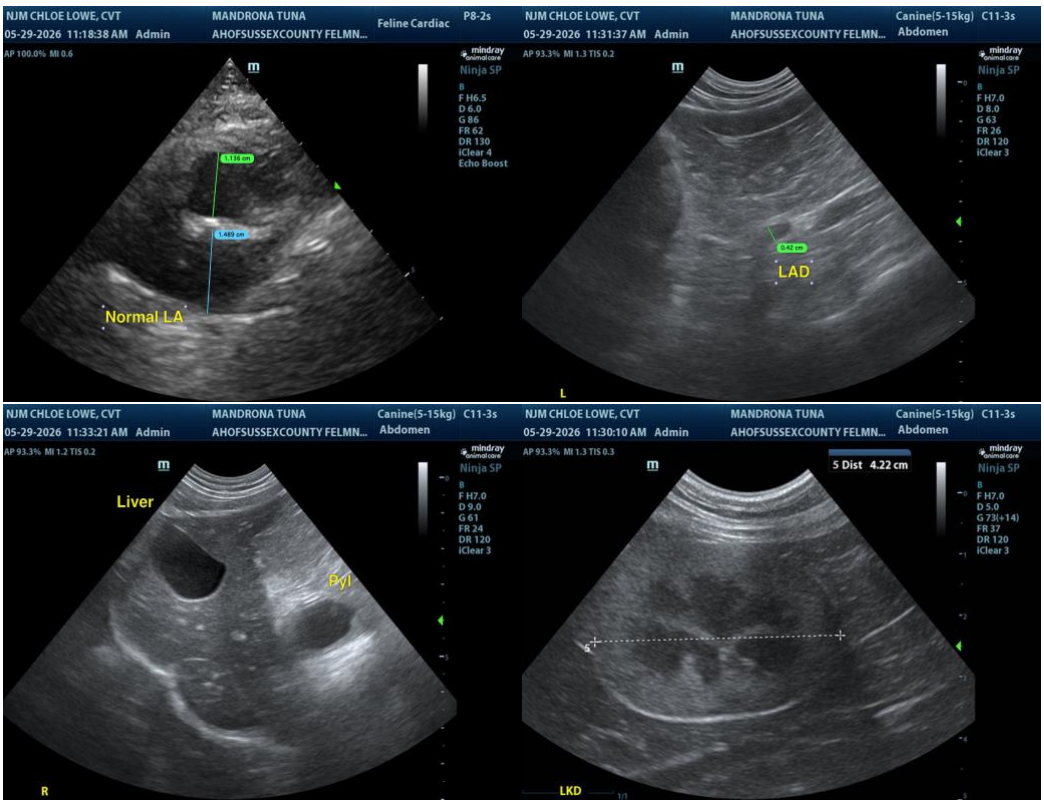
Dr. Mandrona

INVOICE

16562

DATE

05/29/26



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