



PATIENT

Atlas Wilder

PRESENTING CLINICAL SIGNS

Mass or FB, second opinion from Banfield.

SPECIES

Canine

BREED

Boxer

SEX

MN

AGE

8yr

WEIGHT

NA

INTERPRETED BY

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

IMAGING PERFORMED BY

Shari Reffi CVT

HOSPITAL NAME

Tranquility Veterinary
Clinic

REFERRING VET

Dr. Christensen

INVOICE

12831ag

DATE

01/31/2023

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN AND HEART

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			1.4	1.24	35	62	0.41
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	118	1.6	1.2		3.9	3.7	

Cardiac Presentation

The echocardiogram in this patient demonstrated normal left atrial size based on 2 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. Minor centralized MR on Doppler. 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. Normal measured LVOT velocity. 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. No overt TR on Doppler. 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). Normal measured RVOT velocity. Mild volume pericardial effusion was present without evidence of concurrent free pleural fluid. A non-homogenous mass lesion noted on the heart base adjacent to the left atrium and aortic root measuring ~ 3.2 cm in diameter.

Urinary System

The urinary bladder, trigone, cystourethral junction, and visible pelvic urethra 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.

Normal size and margination were present in the kidneys. A normal 1:3 cortex / medulla ratio and normal corticomedullary definition were maintained. The echogenicity of the cortex was similar to or slightly less than normal liver parenchyma while the medulla echogenicity was hypoechoic to the



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cortex with no evidence of pelvic dilation. The left kidney measured 6.9 cm in length. The right kidney measured 7.6 cm in length.

The area of the aortic trifurcation was free of pathology.

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Adrenal Glands

The left adrenal gland was uniform in size and contour with a uniformly hypoechoic parenchyma. The left adrenal gland measured 0.57 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 0.58 cm width at the caudal pole.

BREED

Boxer

Spleen

The spleen exhibited overall normal size and contour with subtle parenchyma heterogeneity. Mildly prominent to enlarged caudal spleen was present with isoechoic mildly non-homogenous parenchyma measuring 3.6 cm in diameter. The splenic vasculature at the hilus was normal in volume with no evidence of congestion or thrombosis.

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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.

WEIGHT

NA

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.

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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.

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

IMAGING PERFORMED BY

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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.

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Free Abdomen

No omental masses, overt lymphadenopathy or peritoneal effusion was present.

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ULTRASONOGRAPHIC FINDINGS

- Heart base mass subjective adjacent to the left atrium and aorta
- Mild volume pericardial effusion-no overt tamponade
- Minor MR, normal LA
- Non-specific mild symmetrical caudal splenomegaly-hyperplasia, hematopoiesis, focal splenitis, potential for emerging neoplastic criteria possible
- Sonographically normal GI tract-no evidence of GI foreign body/obstruction

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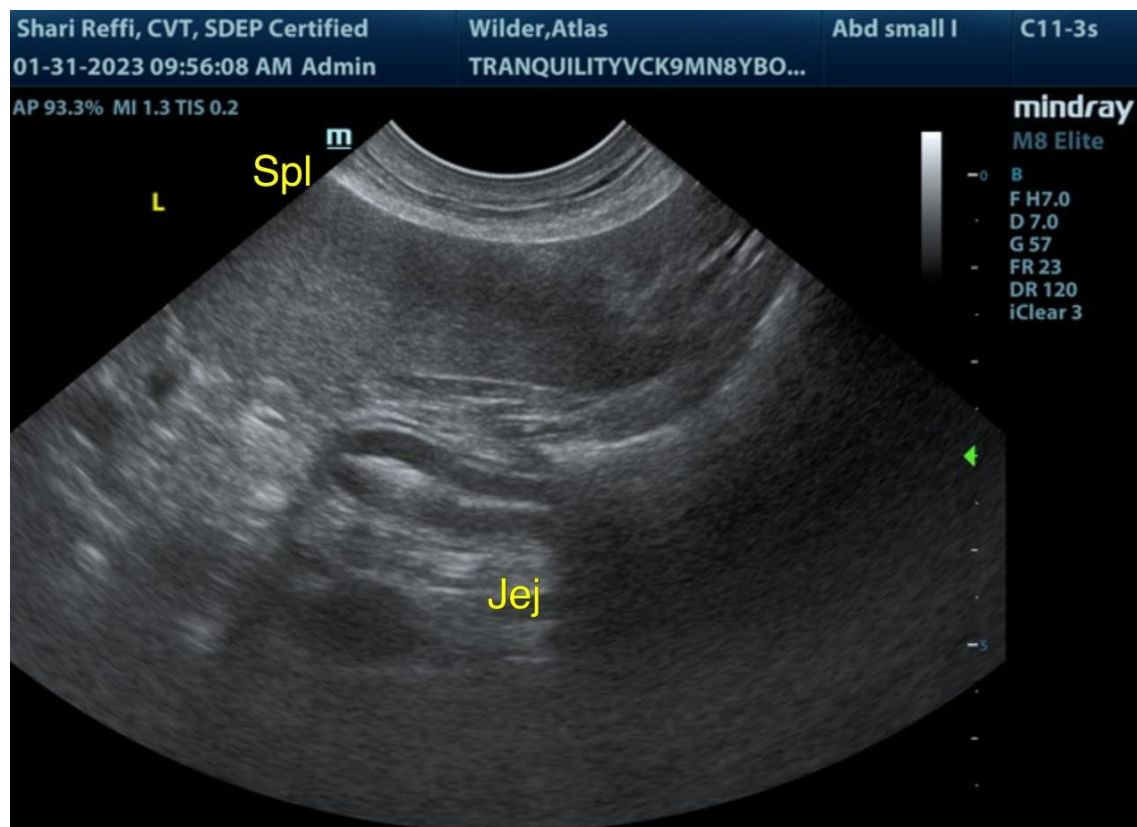
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INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

The primary finding is the heart base with concurrent pericardial effusion. Considerations may include hemangiosarcoma, chemodectoma or other. No obvious evidence of primary intra-abdominal neoplasia was present. Three view chest radiographs are recommended if not done to assess for occult thoracic pathology.

Thoracic CT and oncology consult is likely ideal given this presentation however an extremely guarded to unfavorable prognosis is indicated.





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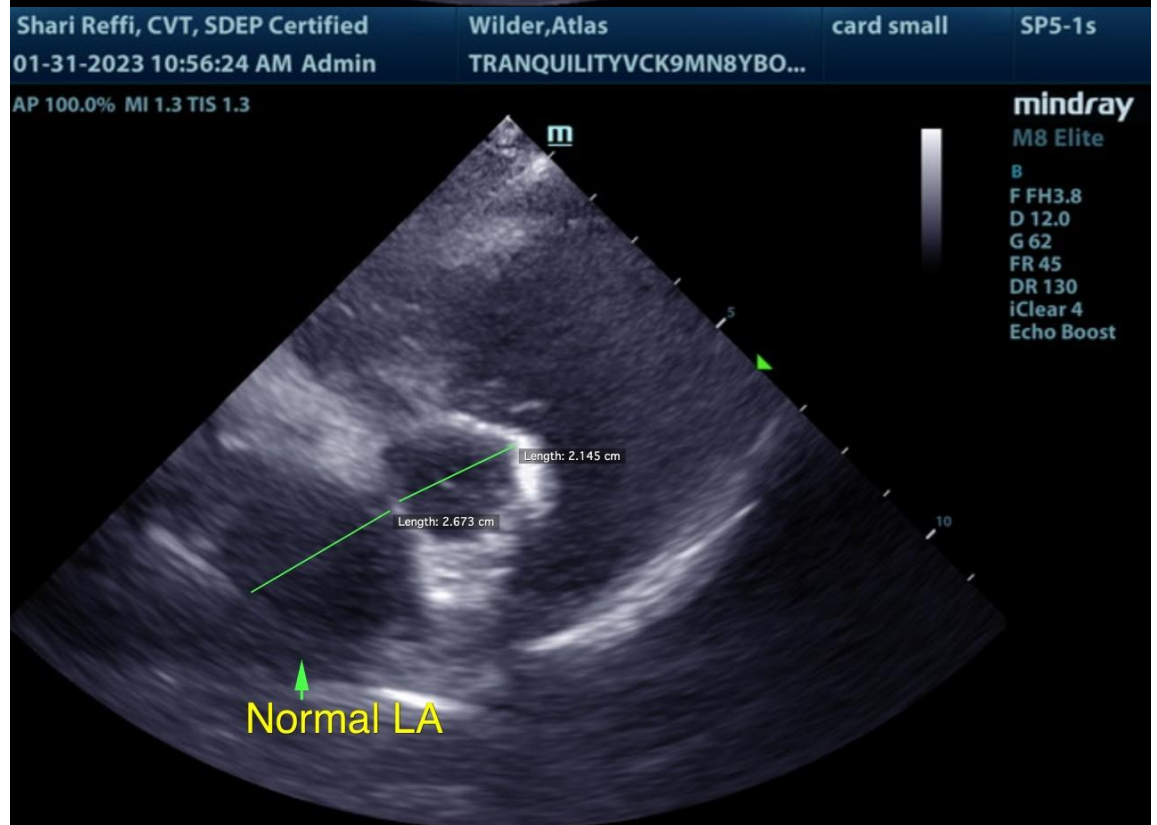
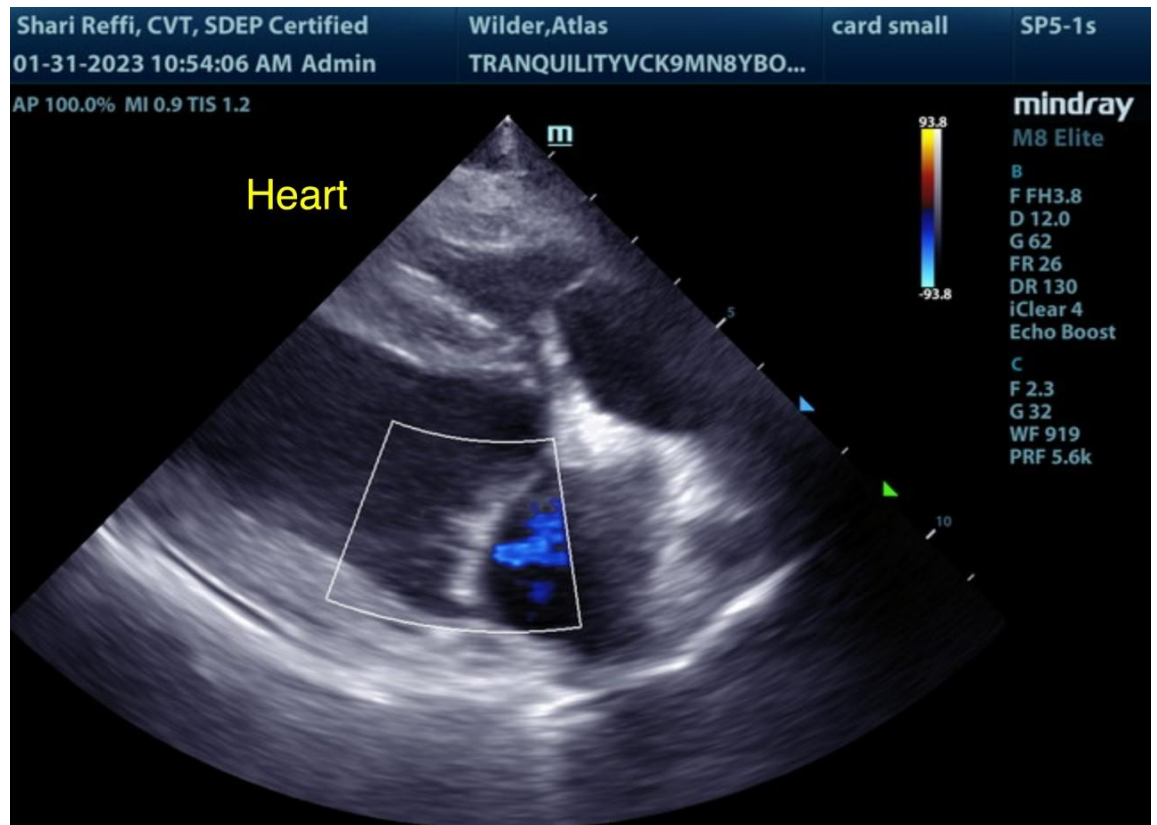
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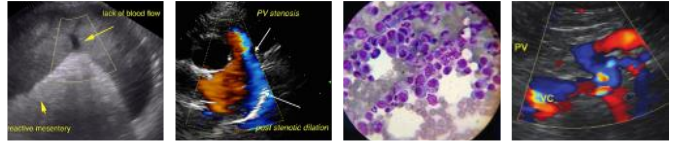
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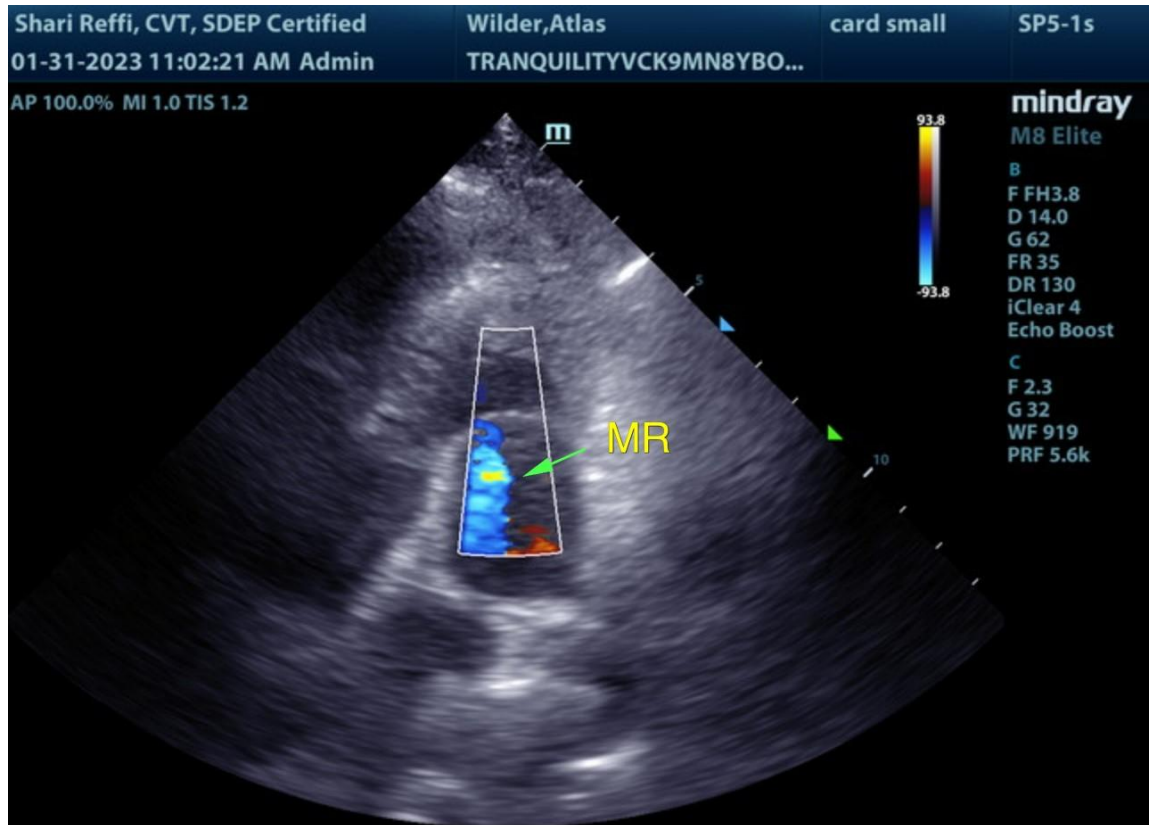
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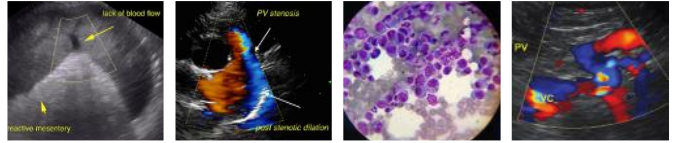
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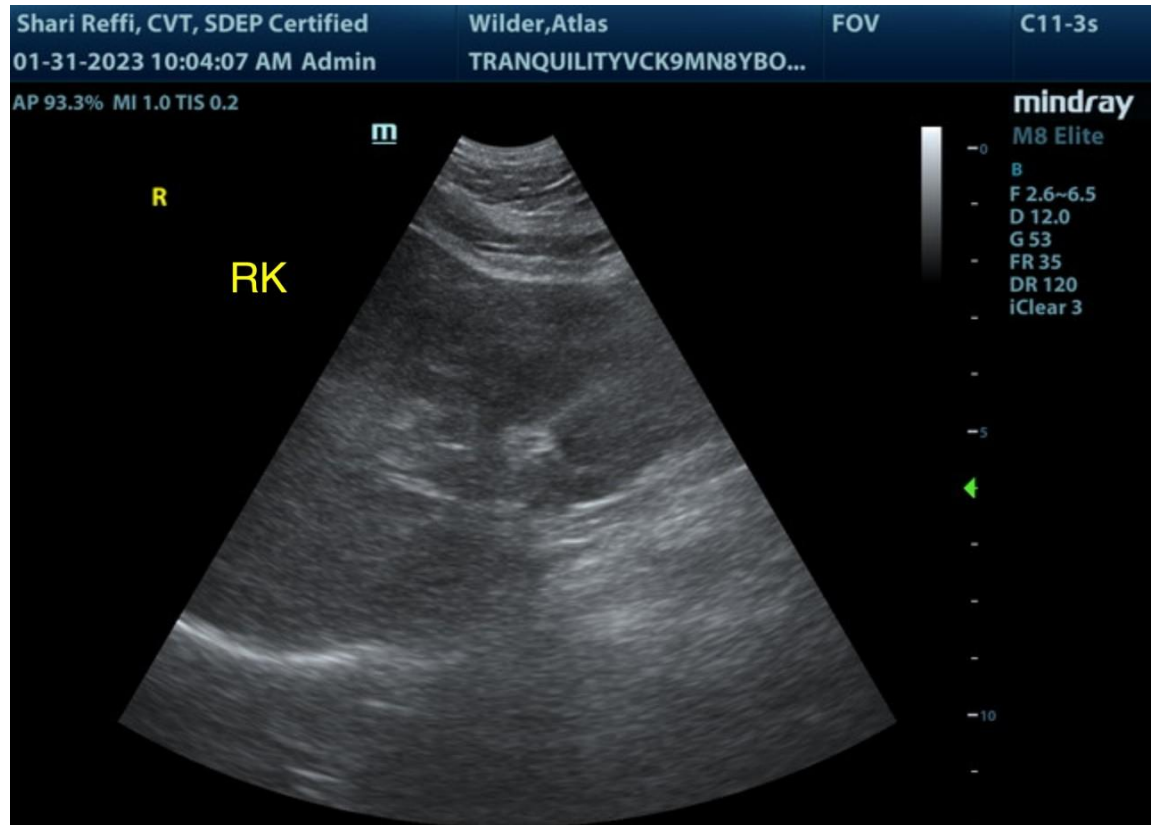
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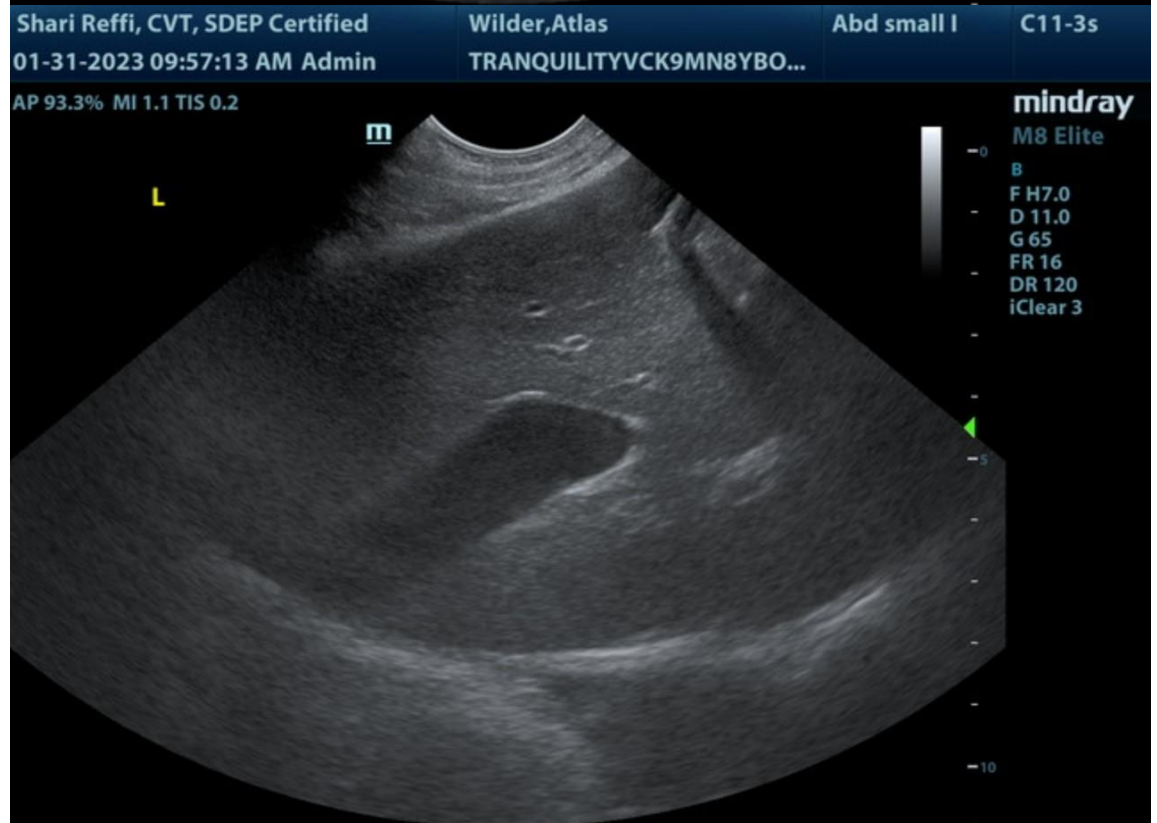
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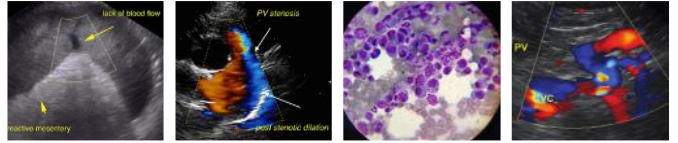
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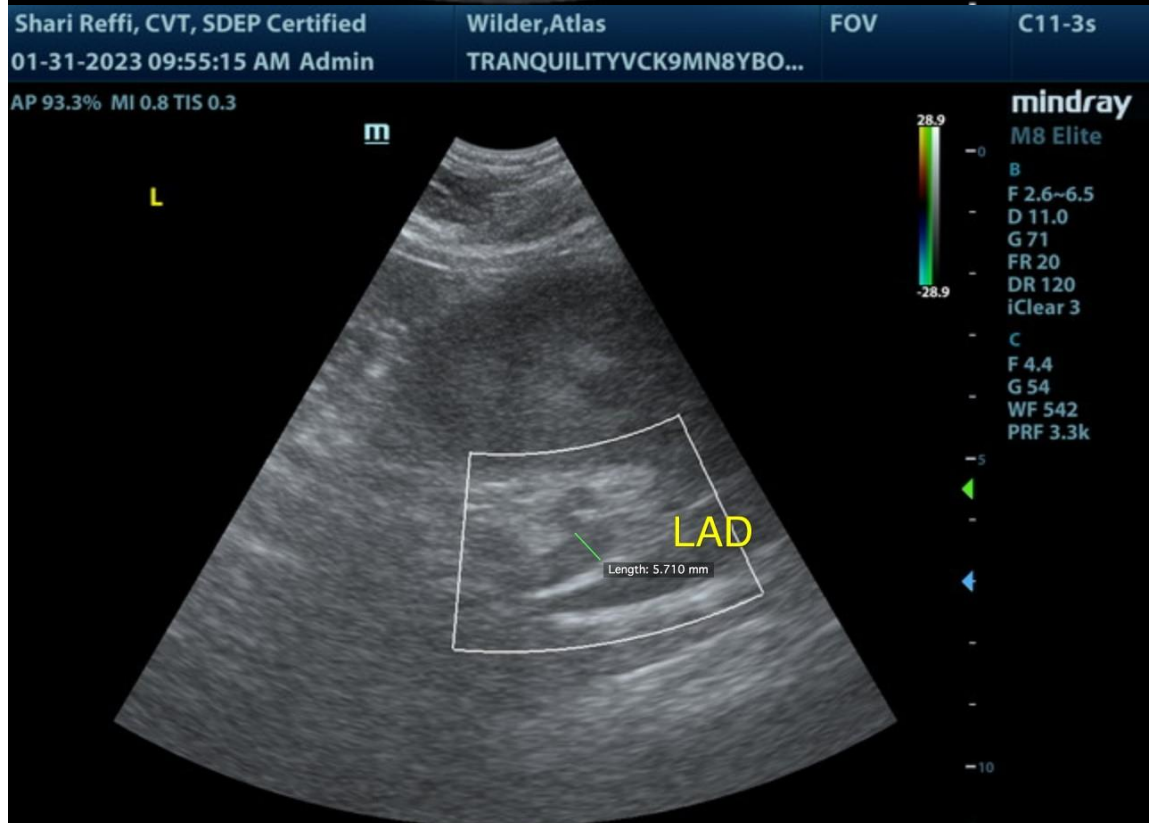
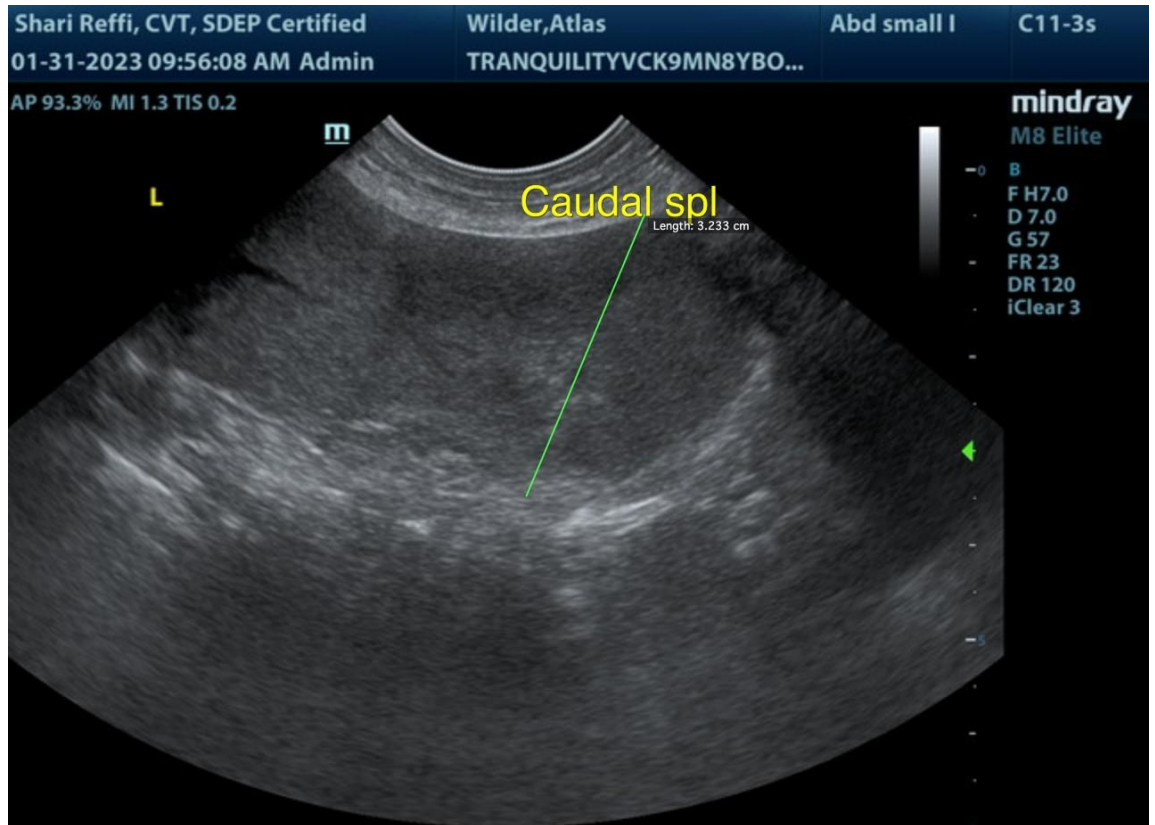
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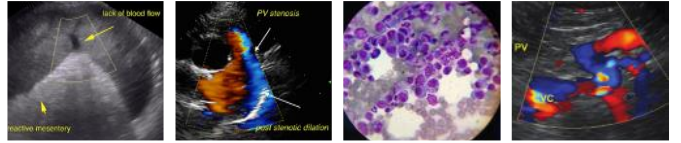
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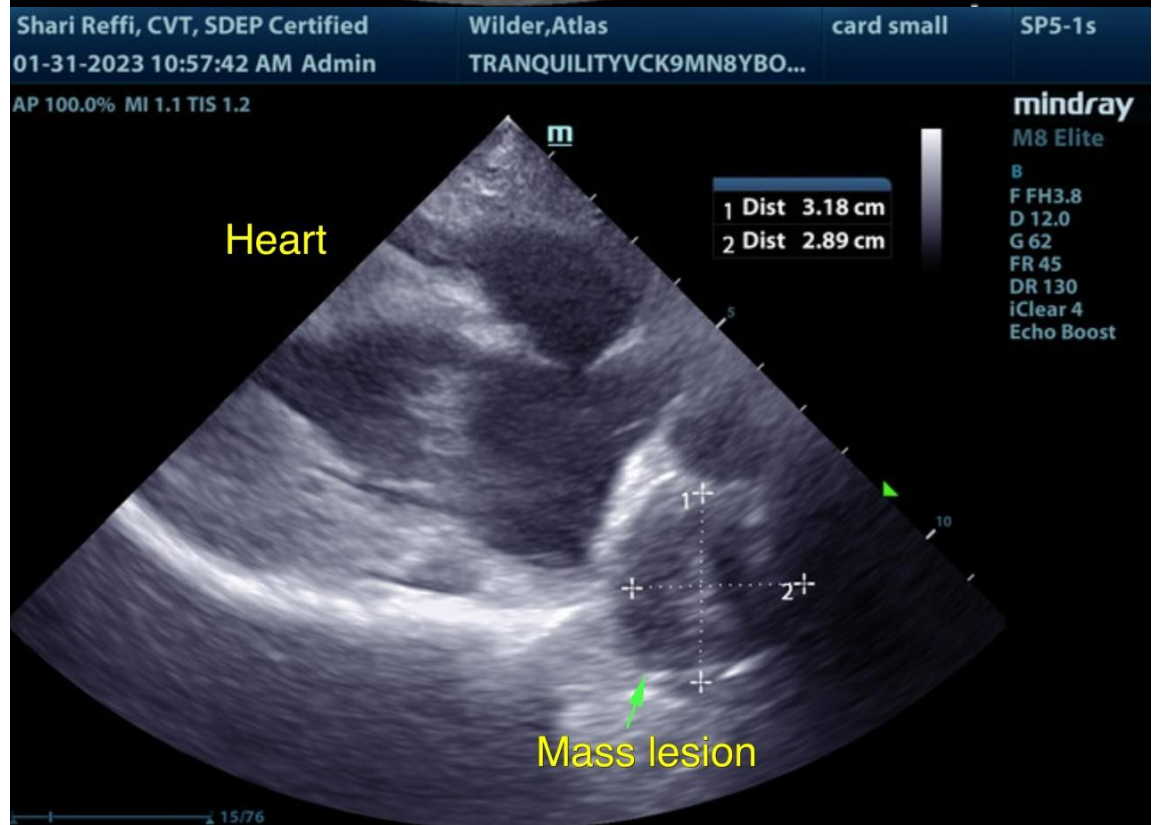
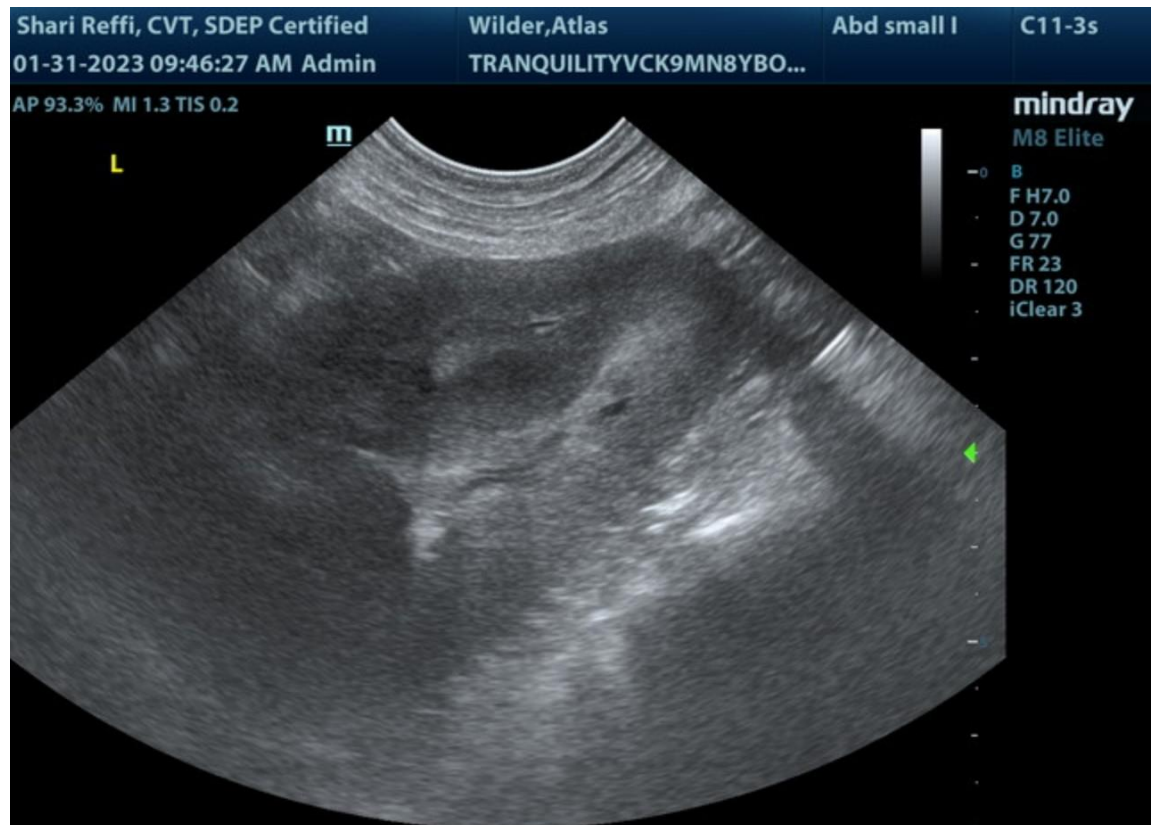
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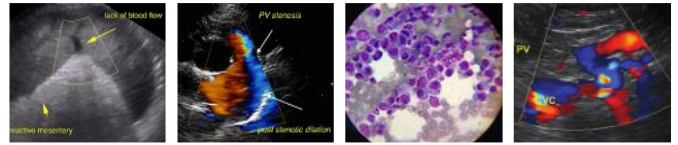
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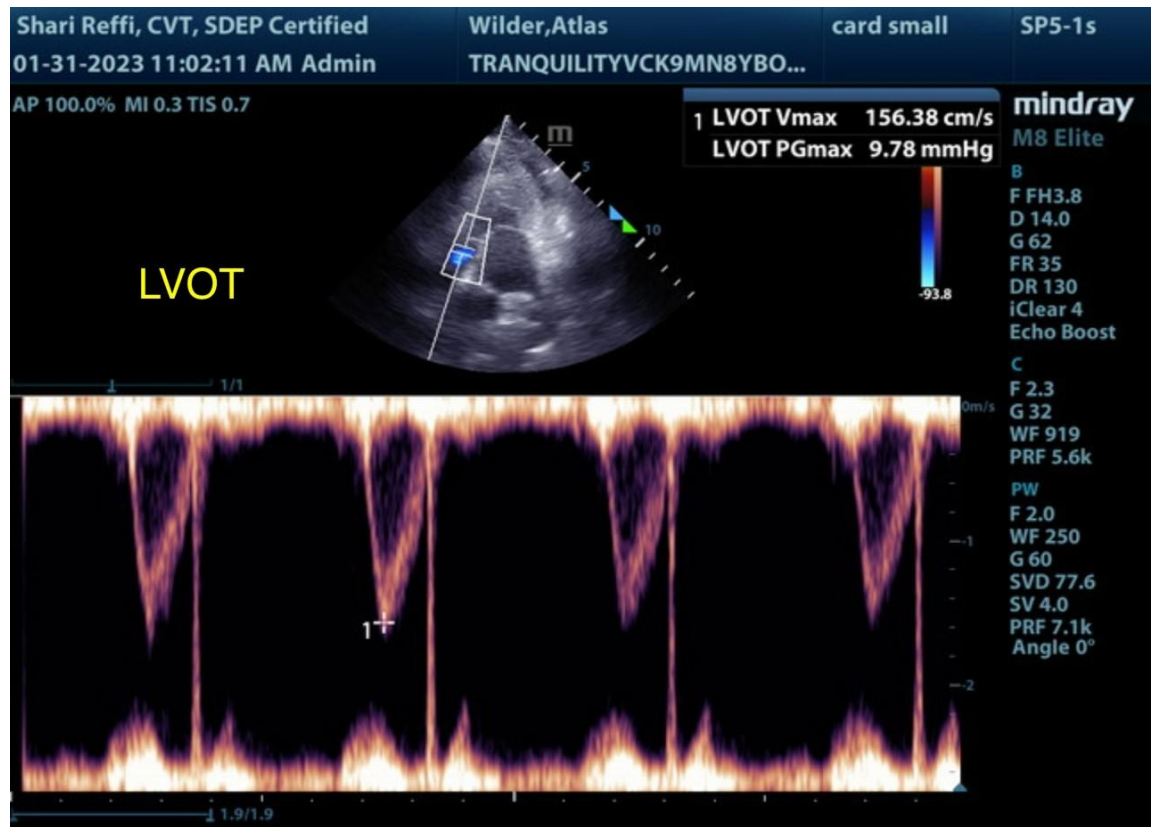
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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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)
mac.daniel@sonopath.com