



PATIENT PRESENTING CLINICAL SIGNS

Max Mccafferty Increased RR, lethargic

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN AND HEART

SPECIES

Canine

BREED

Shih Tzu

SEX

MN

AGE

7yr

WEIGHT

14.6lb

CANINE CARDIAC PARAMETERS	MR VMAX (m/s)	TR VMAX (m/s)	LA/AO M-mode	LA/AO (Heart Base; Swe)	FS (%)	EF (%)	EPSS (cm)
NORMAL PARAMETER	4.5-5.5	<2.7	1.3	Up to 1.6	28-40	40-100	<0.6
PATIENT	--	--	--	1.2	35	68	0.24
CANINE CARDIAC PARAMETERS	HR (BPM)	AV VMAX (m/s)	PV MAX (m/s)	BODY WEIGHT	LAD LA MAX 4 Chamber	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	90	1.2	0.7	14.6lb	2.3	2.3	--

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. No overt 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. No visible pericardial or free pleural fluid was noted. The cranial mediastinum and pericardial and extra-cardiac regions were free of masses in the visible window. Possible bradycardia.

Urinary System

The urinary bladder, trigone, cystourethral junction, and visible pelvic urethra to a depth of 3 cm exhibited normal thickness and tone. Anechoic urine was present in the lumen with no evidence of urine/lumen sediment, mineral, or calculi. The ureteral papillae were normal. The ureters were not visible which is normal. No evidence of inflammatory or neoplastic changes was noted.

INTERPRETED BY

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

IMAGING PERFORMED BY

Rebecca Hamilton

HOSPITAL NAME

Rockaway Animal Hospital

REFERRING VET

Dr Maniar

INVOICE 24629

DATE 04/27/2026



PATIENT

Max Mccafferty

Normal renal size with asymmetrical margination was present in both kidneys. The renal cortex presented uniformly increased in echogenicity with uniform echotexture. The renal cortex appeared to be hypertrophied resulting in an altered cortex: medulla ratio. Mild loss of corticomedullary distinction was also present. The renal medullary volume was subjectively reduced. The left kidney measured 4.2 cm in length. The right kidney measured 4.2 cm in length.

SPECIES

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The area of the aortic trifurcation was free of pathology.

The residual prostate appeared normal and free of pathology

BREED

Adrenal Glands

Shih Tzu

The left adrenal gland was mildly enlarged in size with a uniformly hypoechoic parenchyma. The left adrenal gland measured 0.62 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.

SEX

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Spleen

AGE

7yr

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.

WEIGHT

14.6lb

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. Normal vascular volume. 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.

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Gastrointestinal

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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.

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 mechanical/metabolic ileus, obstruction or foreign material.

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

Pancreas

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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.

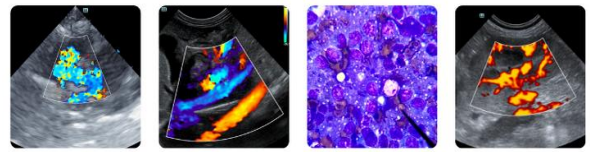
Free Abdomen

INVOICE
24629

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

ULTRASONOGRAPHIC FINDINGS

DATE
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PATIENT

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Primary

- Normal echocardiogram with possible bradycardia
- Non-specific chronic renal changes
- Mild left adrenomegaly -subjective benign

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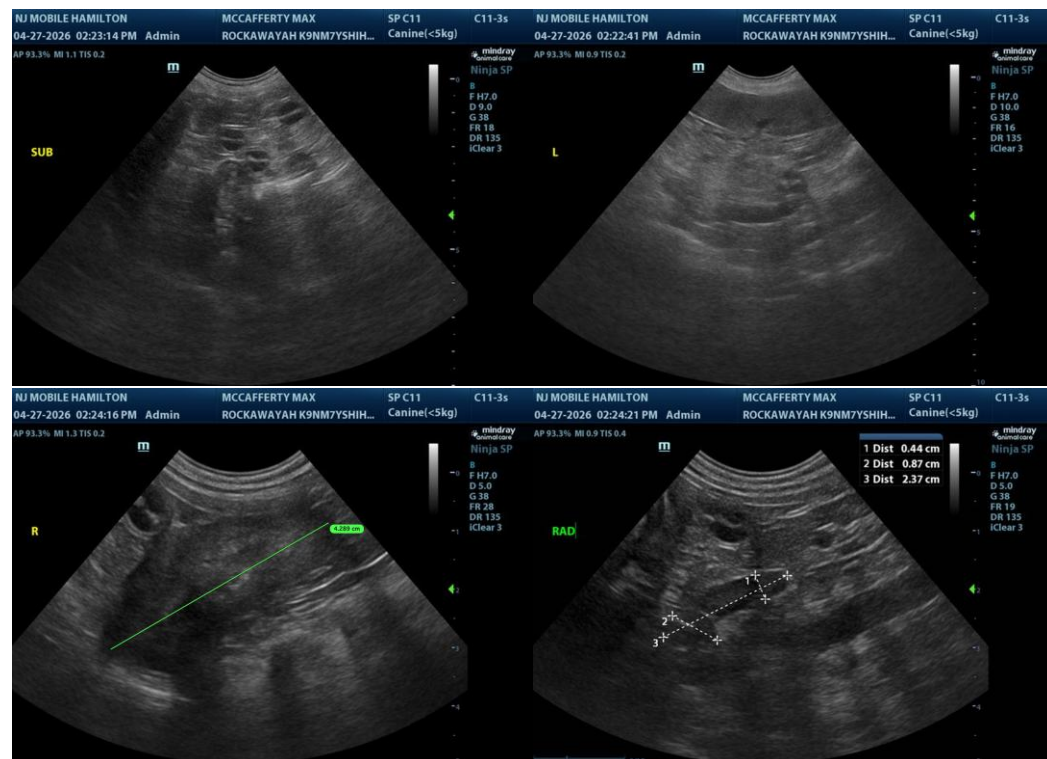
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INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

No evidence of left/ right heart chamber enlargement or clinical pulmonary hypertension as a contributing factor to the increased resting RR. Correlation with ECG +/- Holter monitor and three view chest radiographs to assess for pulmonary disease as a contributing factor is recommended.

Overall, no evidence of significant abdominal visceral pathology aside from non-specific chronic renal changes and subjective mild benign left adrenomegaly. Correlation with full lab work and UA is recommended. The left adrenal gland may indicate incidental hyperplasia or patient variant given current clinical signs and without evidence of concurrent hepatic disease.

Sonographic monitoring of the kidneys if evidence of azotemia as well as of the left adrenal gland for evidence of progressive enlargement with periodic monitoring of systemic BP for evidence of hypertension given mild left adrenomegaly is recommended.





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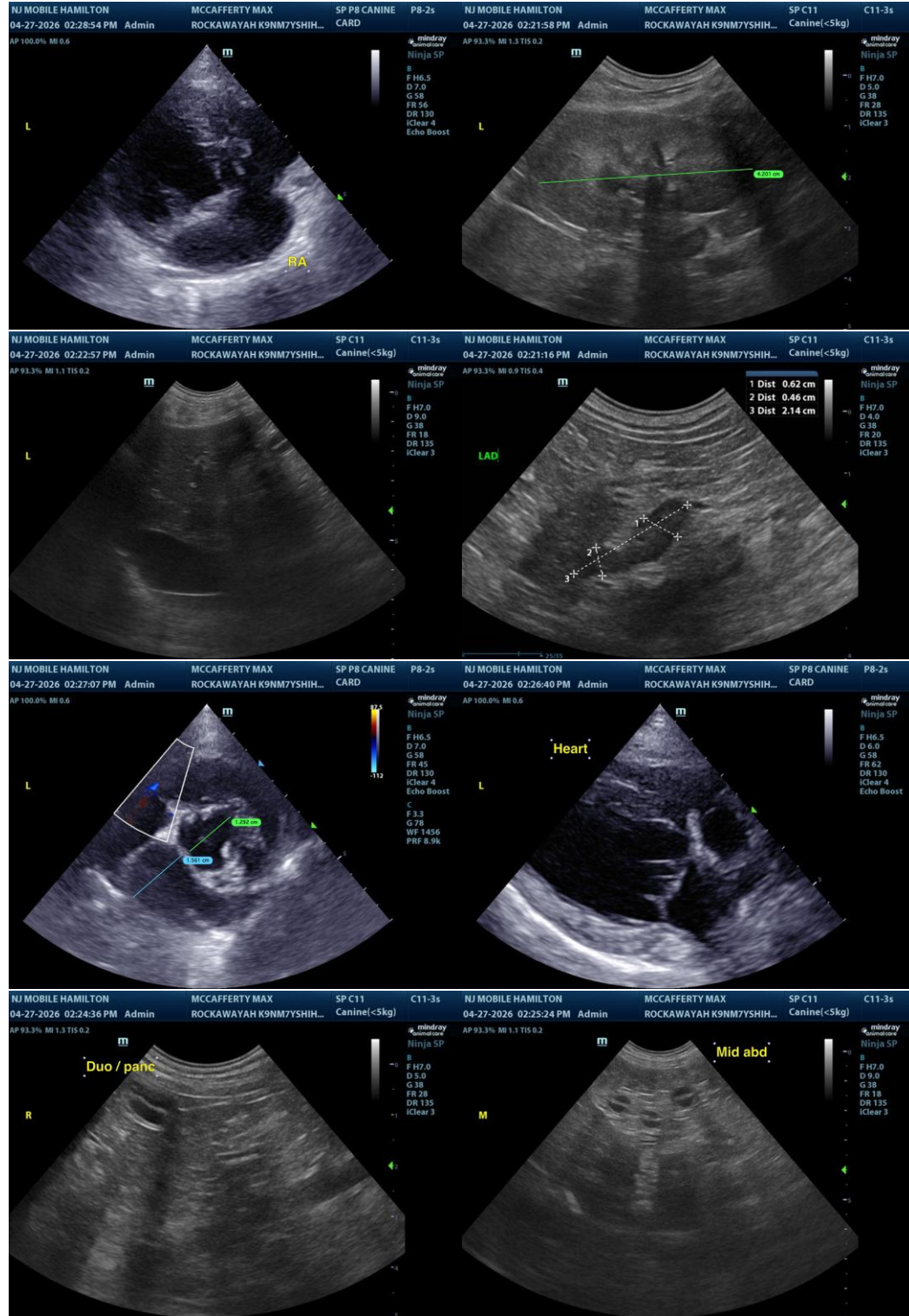
Dr Maniar

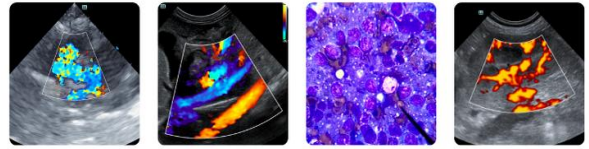
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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

SPECIES

Canine

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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Shih Tzu

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info@sonopath.com

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