



PATIENT

Lilly Hannon

SPECIES

Canine

BREED

Bedlington Terrier

SEX

Female Spayed

AGE

13y 6m

WEIGHT

35.8 lbs

INTERPRETED BY

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

IMAGING PERFORMED BY

Ashley Whitesell

HOSPITAL NAME

Dickson AC

REFERRING VET

Richard Hovis

INVOICE

13063

DATE

1/13/26

PRESENTING CLINICAL SIGNS

History: Signs classic of Cushing dz and Heart Murmur: Combined Echo and abdominal ultrasound and ACTH stim test Gets 1/2 trazodone 100mg every morning so will give 1/2 at 1:30AM when wakes up for snack P is also acting like she is very hungry and will get up in the middle of the night to use the bathroom and eat.

Meds: 1/6/2026: thyroid tabs 0.4mg twice a day, Trazodone

Abnormal PE/Chem/CBC/UA Results: ALT 128 Alkaline Phosphatase 1,534 urine specific gravity 1.014 The thyroid is low at 0.5, so we have ordered Free T4 by equilibrium dialysis and TSH test 1-6-2026 T4 0.5 TSH 0.8 Free T4 3.3 ACTH stim pending Blood Pressure Measurement: Cuff Size 3 Location left forelimb Systolic 206 mmHg Diastolic 127 mmHg MAP 160 mmHg HR 136 bpm

**ULTRASONOGRAPHIC EXAMINATION OF THE HEART & ABDOMEN **

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	--	--	--	1.6	42	65	0.3
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	NM	1.9	1.3	35.8	3.4	3.0	--

Cardiac Presentation

The echocardiogram in this patient demonstrated borderline increased **left atrial** size based on 2 different LA measurement methods. Chamber volumes and echogenicity were normal. The cranial and caudal **mitral** valve leaflets presented thickening consistent with endocardiosis. Doppler indicated moderate eccentric insufficiency. 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. 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. The **right ventricle** was of



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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). No visible **pericardial** or free pleura fluid was noted. No echographically detectable evidence of cardiac / pericardial tumors was visible.

Urinary System

The urinary bladder, trigone, cystourethral junction, and visible pelvic urethra to a depth of 3.0 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 were noted.

The area of the aortic trifurcation was free of pathology.

Normal size and margination was 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 5.1 cm in length. The right kidney measured 5.3 cm in length.

Adrenal Glands

The left adrenal gland was enlarged in size with mild asymmetrical capsule contour with swollen caudal pole measuring 1.25 cm width at the caudal pole. The right adrenal gland was mildly enlarged in size and contour with a uniformly hypoechoic parenchyma. The right adrenal gland measured 0.82 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

The liver presented enlarged in size. The parenchyma of the liver was subjectively normal in echogenicity compared to the spleen and renal cortices. The liver parenchyma was uniform with a mildly coarse echotexture. The capsule of the liver was symmetrically rounded to mildly swollen in margination. The hepatic and portal vasculature were normal in appearance without signs of congestion. The gallbladder was non distended in size with mild, non-organized, echogenic, nonmineralized biliary sludge. The cystic duct and common bile ducts were normal without evidence of dilation.

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.

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.



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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.

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Free Abdomen

BREED

No overt lymphadenopathy or peritoneal effusion was present.

Bedlington Terrier

ULTRASONOGRAPHIC FINDINGS

SEX

- Chronic mitral valve disease (ACVIM B1 – emerging B2)
- Hepatopathy
- Non-organized, mild gallbladder debris (non-mucocele)
- Bilateral adrenomegaly
- Age-related renal changes

Female Spayed

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INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

WEIGHT

35.8 lbs

The cause of the murmur is consistent with degenerative valvular changes and secondary eccentric MR. The borderline increased LA dimension indicates the current and future risk of complication is borderline and mildly elevated yet without evidence of significant LA enlargement. No obvious indication for cardiac medications at this stage, however prognosis is variable and sonographic monitoring is advised. Recheck echo suggested in 6 months, sooner if clinically indicated. Current cardiac anesthetic risk is mild. Suggested anesthetic protocol may include opioid or Benzodiazepine pre-med, induction with Propofol or Alfaxalone, and appropriate gas anesthesia with avoidance of alpha 2 agonists.

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Correlation with adrenal testing is recommended. Benign hepatopathy and bilateral adrenomegaly, i.e. vacuolar/steroid hepatopathy, cholestasis, potential concurrent hepatic inflammatory disease, bilateral adrenal hyperplasia or left adrenal adenomatous change probable. Sonographic monitoring of the left adrenal gland given caudal adrenomegaly as well as monitoring of systemic BBP for evidence of hypertension is recommended. Hepato-supportive medications may prove beneficial.

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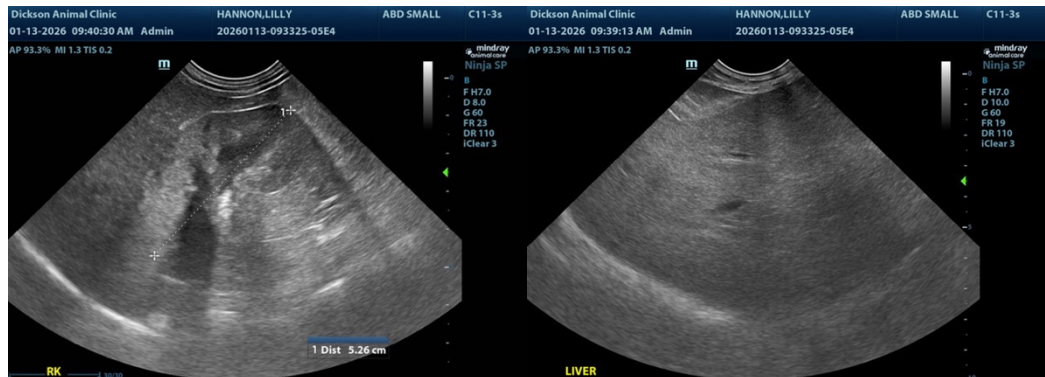
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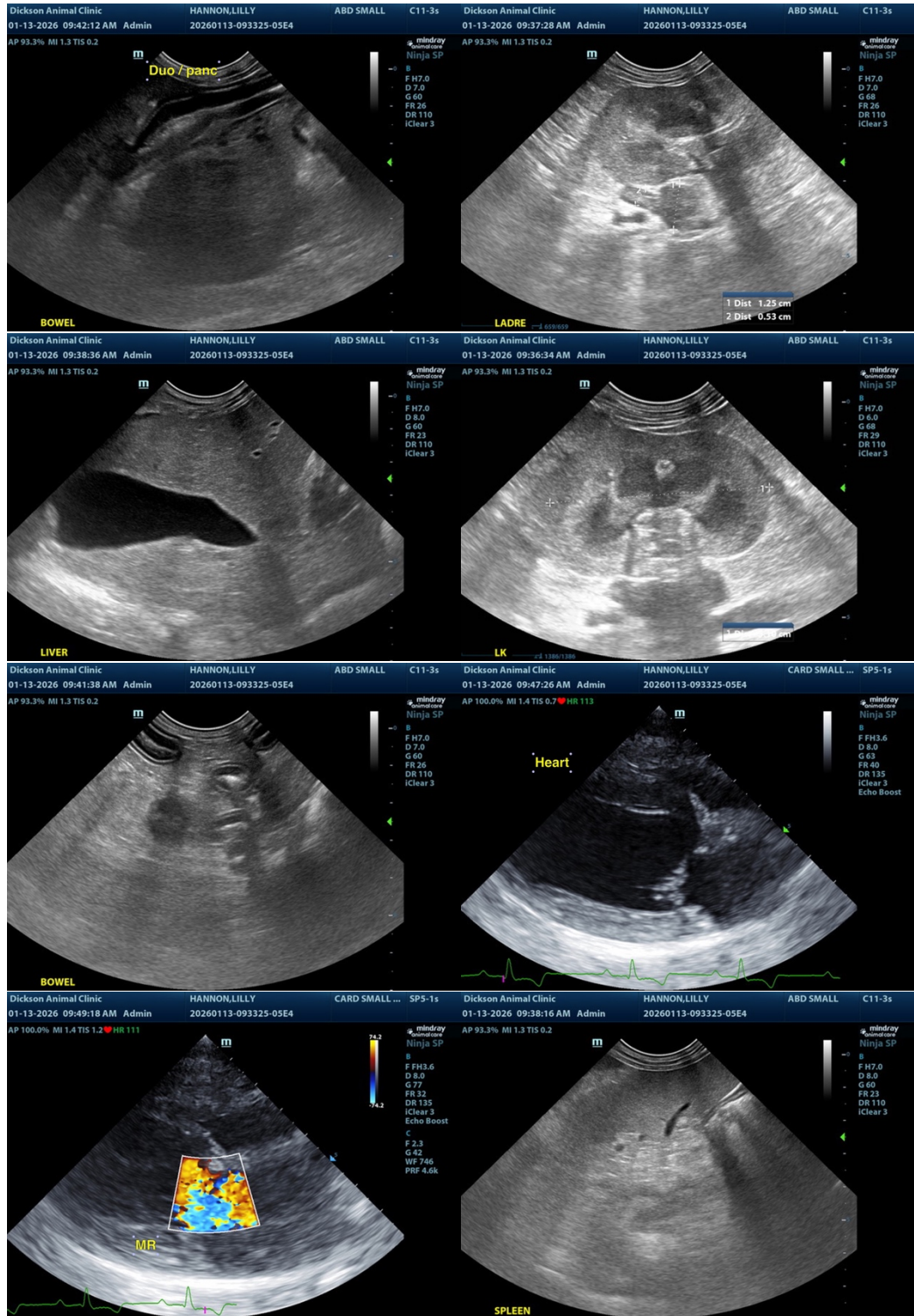
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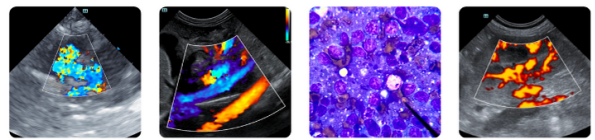
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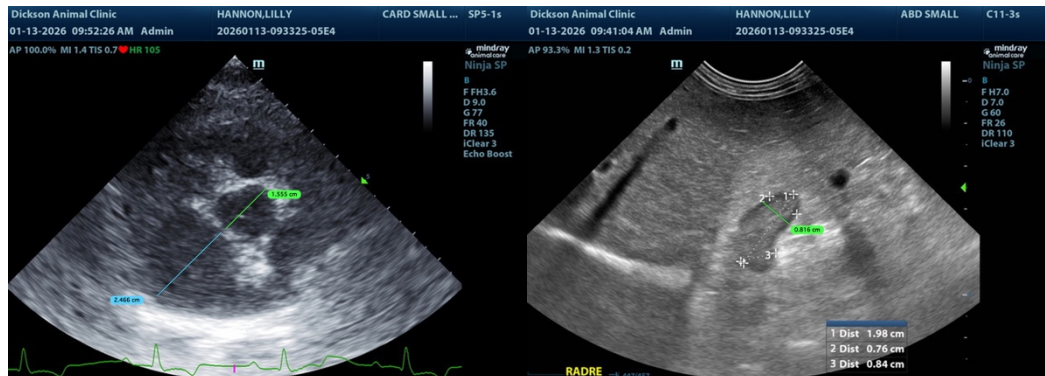
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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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)

info@sonopath.com