


PATIENT

Bella Tomasello

PRESENTING CLINICAL SIGNS

Grade 3/6 heart murmur, recent history of collapsing (r/o syncopal episode). Hx of atypical Cushing's. Hx of kidney disease (previous azotemia) > resolved on renal diet. Current meds: Thyro Tabs 0.1mg, Lignans, Melatonin

SPECIES

Canine

Abnormal PE/Chem/CBC/UA Results: 8/1/23- ALKP 331, K 5.7

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN AND HEART
BREED

Bichon Frise

SEX

FS

AGE

11yr

WEIGHT

14.8lb

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	<1.6	28-40	40-100	<0.6
PATIENT	5.6		1.3	1.2	52	85	0.1
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	162	1.9	1.5		2.5	2.4	

INTERPRETED BY

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

Cardiac Presentation

The echocardiogram in this patient demonstrated normal left atrial size based on 3 different LA measurement methods. Chamber volumes and echogenicity were normal. The cranial and caudal mitral valve leaflets presented mild thickening consistent with endocardiosis. Doppler indicated measurable mild 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. Minor TR present 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). No visible pericardial or free pleura fluid was noted. No echographically detectable evidence of infiltrative disease was visible. The cranial mediastinum and pericardial regions were free of masses in the visible window. No evidence of arrhythmia.

IMAGING PERFORMED BY

Jessica Miller

HOSPITAL NAME

 Heart and Paw Lake
 Hopatcong

REFERRING VET

Dr Verhalen

INVOICE

14686ag

Urinary System
DATE

08/21/2023



PATIENT	The urinary bladder presented uniformly thickened urinary bladder wall isoechoic to the adjacent normal urinary bladder wall. The luminal margin of the thickened urinary bladder wall was mildly asymmetrical in contour. Urinary bladder wall thickness measured 0.6 cm. Mineralization or echogenic foci within the thickened areas of urinary bladder wall was not present. The urinary bladder, trigone, cystourethral junction, and visible pelvic urethra exhibited normal tone. Anechoic urine was present in the lumen with mild non-dependent particulate sediment. The ureteral papillae were normal. The ureters were not visible which is normal.
Bella Tomasello	
SPECIES	
Canine	
BREED	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 moderate loss of corticomedullary symmetry and definition expected for the age of the patient. No evidence of pelvic dilation was present. Intermittent cortical cysts were noted. The left kidney measured 4.7 cm in length. The right kidney measured 5.0 cm in length.
Bichon Frise	
SEX	The area of the aortic trifurcation was free of pathology.
FS	Adrenal Glands
AGE	The bilateral adrenal glands were normal in size. Mild parenchyma heterogeneity and mild capsule asymmetry was present without suspicion for overt neoplasia. The left adrenal gland measured 2.3 cm length and 0.47 cm width in the caudal pole. The right adrenal gland measured 2.3 cm length and 0.55 cm width in the caudal pole.
11yr	
WEIGHT	Spleen
14.8lb	The spleen exhibited primarily finely textured and homogenous parenchyma which was hyperechoic to the liver and renal cortical parenchyma. Intermittent small perihilar to medial parenchymal well-defined, symmetrical, hyperechoic nodules were present. 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 or neoplastic changes were not noted. The hyperechoic nodules tend to trend benign and are most consistent with benign hyperplasia or myelolipomas.
INTERPRETED BY	Liver/Gallbladder
R. McKenzie Daniel, DVM, DABVP (Canine and Feline)	The liver was mild to moderately enlarged with symmetrical contour and non-homogenous parenchyma. Subtle hyperechoic nodules consistent with lipogranulomas were present. No masses. 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 with mild to moderate non-organized hyperechoic sediment. The cystic and common bile ducts were normal.
IMAGING PERFORMED BY	Gastrointestinal
Jessica Miller	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.
HOSPITAL NAME	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.
Heart and Paw Lake Hopatcong	Normal visible colon wall layers were present with apparent formed feces in lumen.
REFERRING VET	
Dr Verhalen	
INVOICE	
14686ag	
DATE	
08/21/2023	



PATIENT

Pancreas

Bella Tomasello

The right pancreatic limb exhibited subtle prominent size with capsule asymmetry and mild hypoechoic to non-homogenous parenchyma.

SPECIES

Free Abdomen

Canine

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

BREED

ULTRASONOGRAPHIC FINDINGS

Bichon Frise

- Overall normal cardiac structure and function.
- Mild compensated MR (ACVIM B1)
- Minor TR.
- Cystitis pattern with mild sediment.
- Chronic renal changes with small cortical cysts.
- Mild irregular adrenal glands- no adrenal tumors.
- Enlarged non-congested liver- suggestive of vacuolar hepatopathy pattern.
- Gallbladder debris (non-mucocele).
- Benign splenic nodules consistent with myelolipomas.
- Mildly prominent non-homogenous/hypoechoic right pancreas.

SEX

FS

AGE

11yr

WEIGHT

14.8lb

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

The lack of left atrial enlargement or left heart volume overload implies that the risk of complication secondary to mitral valve insufficiency is relatively low at this time. No indication for cardiac medications. A definitive cardiac cause of recent collapse episodes was not obvious. Paroxysmal arrhythmia cannot be definitively excluded.

INTERPRETED BY

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

Prognosis at this stage is variable and serial sonographic monitoring is recommended with a recheck echocardiogram in 6 months, sooner if clinical signs suggestive of heart disease develop. A screening BP is advised to assess for evidence of hypertension. Hepatosupportive medications such as Denamarin and Ursodiol may prove beneficial. No evidence of intra-abdominal neoplastic criteria.

IMAGING PERFORMED BY

Jessica Miller

HOSPITAL NAME

Heart and Paw Lake
Hopatcong

REFERRING VET

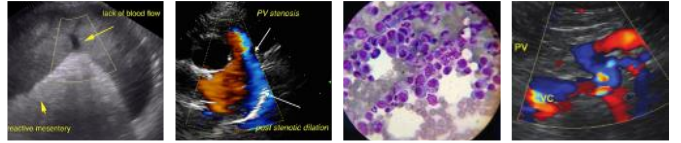
Dr Verhalen

INVOICE

14686ag

DATE

08/21/2023



PATIENT

Bella Tomasello

SPECIES

Canine

BREED

Bichon Frise

SEX

FS

AGE

11yr

WEIGHT

14.8lb

INTERPRETED BY

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

IMAGING PERFORMED BY

Jessica Miller

HOSPITAL NAME

Heart and Paw Lake
Hopatcong

REFERRING VET

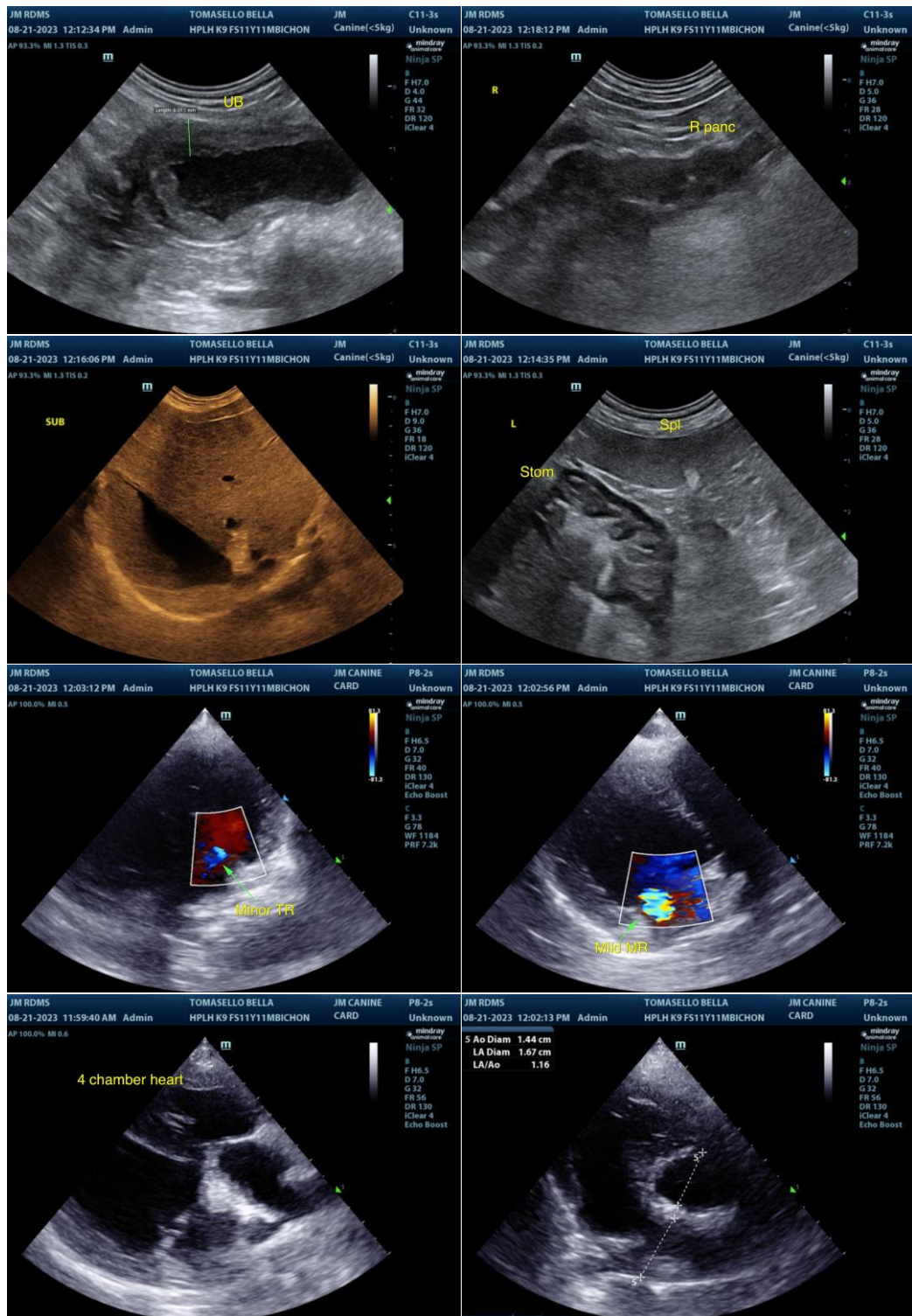
Dr Verhalen

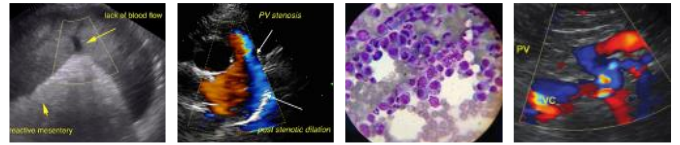
INVOICE

14686ag

DATE

08/21/2023





PATIENT

Bella Tomasello

SPECIES

Canine

BREED

Bichon Frise

SEX

FS

AGE

11yr

WEIGHT

14.8lb

INTERPRETED BY

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

IMAGING PERFORMED BY

Jessica Miller

HOSPITAL NAME

Heart and Paw Lake
Hopatcong

REFERRING VET

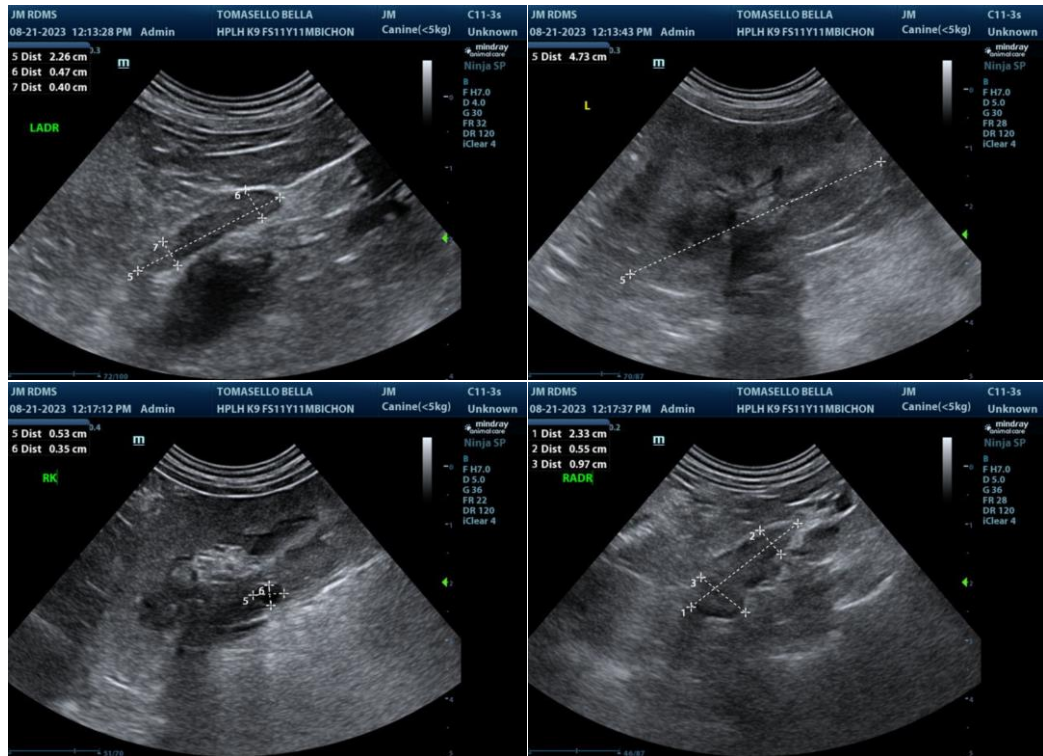
Dr Verhalen

INVOICE

14686ag

DATE

08/21/2023



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