



PATIENT

Tuxxi Adami

SPECIES

Feline

BREED

DSH

SEX

Spayed Female

AGE

12.5 Years

WEIGHT

7.18 Pounds

INTERPRETED BY

Eric Lindquist, DMV
DABVP, Cert. IVUSS

IMAGING PERFORMED BY

Kelly Vazquez

HOSPITAL NAME

Westwood Regional
VH

REFERRING VET

Dr. Hartwick

INVOICE

22064

DATE

4/17/23

PRESENTING CLINICAL SIGNS

History: Patient presents for echo due to elevated heart rate/gallop rhythm - R/O HCM/other. Patient is hyperthyroid and was at one point on Methimazole 5 mgs x 1.5 tabs BID. Abdominal U/S - due to underweight, PU/PD, increasing liver values - no response to Baytril/Metro (liver dose); R/O all causes of hepatopathy and heart disease. No current meds as of 4/15/23; stopped methimazole. Blood pressure: 160/70, 150/80.

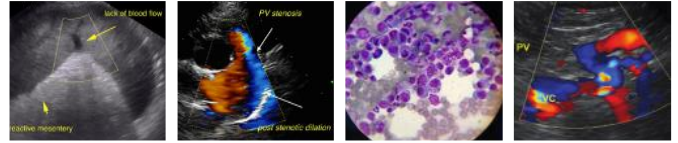
Abnormal PE/Chem/CBC/UA Results: 3/8/23: AST 100, ALT 627, BUN 38, creat. 1.7, renal tech +. CBC: WBC 20.1, neutrophilia/monocytosis, T4 0.5. Decreased dose methimazole to 5 max 1.5 in the a.m. and 1 tab p.m. Trial Baytril/metro. 4/12/23: AST 253, ALT 863, Alk. Phos. 271, BUN 44, amylase 1992, T4 still < 0.5, HWT (neg/neg). Stopped Methimazole on 4/15/23. U/A: 4/12/23: pH 5.0, sed= neg., USG 1.017.

ULTRASONOGRAPHIC EXAMINATION OF THE HEART & ABDOMEN

FELINE CARDIAC PARAMETERS	BODY WEIGHT (kg)	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	--	190	0.48	1.9	0.51	46	80
FELINE CARDIAC PARAMETERS	LA/AO (Boon)	LA/AO HEART BASE (Sisson)	LA 2D 4-chamber long axis AS to FW (Sisson) (cm)	LVOT VEL. (m/s)	RVOT VEL. (m/s)	IVRT (m/)	
NORMAL PARAMETER	<1.5	0.88-1.79	0.7-1.7	<1.6	<1.3	40-60	
PATIENT	1.0	1.3	--	--	--	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 based on 3 separate LA measurements. Mitral insufficiency was noted on color flow and spectral doppler. The **left ventricle** presented normal 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 and angles 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 and kinetics. 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 or extra cardiac pathology in the visible planes.



PATIENT

The cranial **mediastinum and pericardial regions** were free of masses in the visible window. Arrhythmogenic activity was noted during the exam.

Tuxxi Adami

Urinary System

SPECIES

The **urinary bladder**, trigone, and pelvic urethra presented normal thicknesses and normal tone. The ureters were not visible which is normal. No uroliths or sediment were visualized and anechoic urine was present. No evidence of inflammatory or neoplastic changes were noted. Ureteral papillae were normal.

Feline

BREED

The **kidneys** revealed largely normal size and structure, corticomedullary definition and ratio (cortex 1/3 of medulla) were essentially maintained with some minor age-related loss of curvilinear patterns regarding the capsule and C/M junction. The cortices presented largely uniform texture with some increased echogenicity expected for his age patient. Medullary structure differed distinctly from that of the cortex and no evidence of pelvic dilation was present. The left kidney measured 3.2 cm. Slight nonobstructive pinpoint mineralizations were noted.

DSH

SEX

Spayed Female

AGE

Adrenal Glands

The **left adrenal gland** was visualized and recognized as having normal shape, size, position and echogenicity for this breed. The phrenic vasculature, glandular echogenicity and detail were unremarkable. Capsule, cortex, and medullary definition were normal for this age patient. The left adrenal gland measured 0.33 cm.

12.5 Years

WEIGHT

The region of the **right adrenal gland** revealed no evident pathology.

7.18 Pounds

INTERPRETED BY

Spleen

The **spleen** revealed subtle micronodular changes.

Eric Lindquist, DMV
DABVP, Cert. IVUSS

Liver

The **left liver** in this patient revealed an large/expansive nodular mass, measuring 3.0+ cm, impinging upon the gallbladder. The mass was moderately vascular. Adjacent nodular changes were noted in the liver. Some minor heterogenous changes were noted in the right liver as well, may be an extension of the left sided process. The gallbladder and common bile duct were unremarkable.

IMAGING PERFORMED BY

Kelly Vazquez

Gastrointestinal

Examination of the **gastrointestinal tract** revealed a stomach and intestine free of stasis, of normal wall thickness, acceptable curvilinear mural detail, and peristaltic activity. Small and large intestine demonstrated normal luminal chyme and stool consistency respectively. No obstructive or overt infiltrative disease was noted. No associated abnormal lymphatic activity was noted.

HOSPITAL NAME

Westwood Regional
VH

REFERRING VET

Dr. Hartwick

Pancreas

The base and limbs of the **pancreas** were observed to be largely isoechoic to surrounding omental fat. Pancreatic duct and capsular contour were acceptably normal and parenchyma respected normal curvilinear patterns. No overt evidence of active inflammatory or neoplastic disease was noted.

INVOICE

22064

ULTRASONOGRAPHIC FINDINGS

DATE

4/17/23

- Arrhythmogenic activity
- Compensated mitral insufficiency



PATIENT

Tuxxi Adami

- Normal volume and contractility
- Left liver mass with adjacent nodular changes and caudate liver mass, unlikely to be resectable.
- Subtle micronodular splenic changes
- Age-related renal changes with mineralization

SPECIES

Feline

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

BREED

DSH

FNA of the various left and right sided masses are recommended for further definition. Suspect carcinoma, possibility of lymphoma. CT evaluation for potential surgical intervention is warranted. Prognosis is very guarded to poor.

SEX

Spayed Female

AGE

12.5 Years

WEIGHT

7.18 Pounds

INTERPRETED BY

Eric Lindquist, DMV
DABVP, Cert. IVUSS

IMAGING PERFORMED BY

Kelly Vazquez

HOSPITAL NAME

Westwood Regional
VH

REFERRING VET

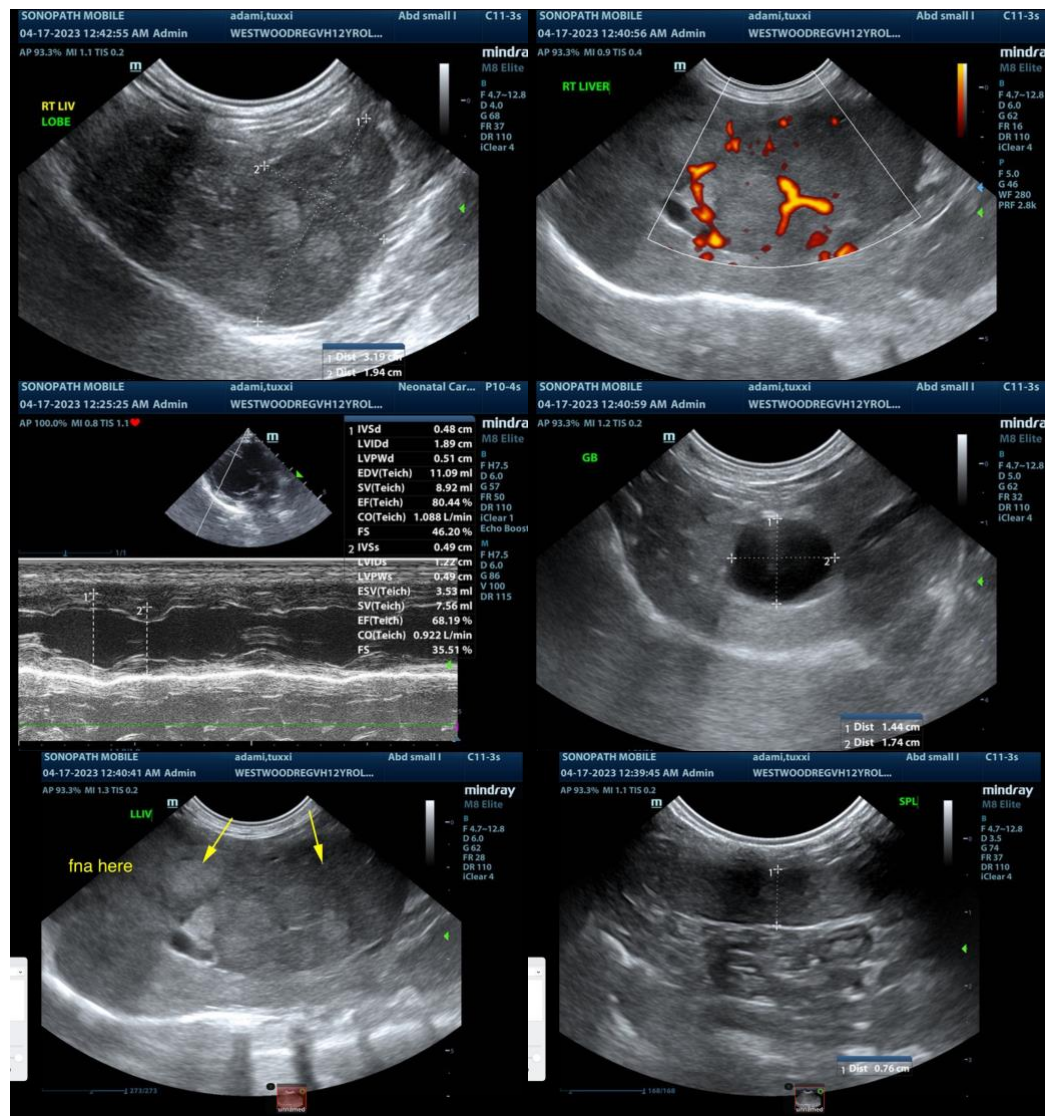
Dr. Hartwick

INVOICE

22064

DATE

4/17/23





PATIENT

Tuxxi Adami

SPECIES

Feline

BREED

DSH

SEX

Spayed Female

AGE

12.5 Years

WEIGHT

7.18 Pounds

INTERPRETED BY

Eric Lindquist, DMV
DABVP, Cert. IVUSS

IMAGING PERFORMED BY

Kelly Vazquez

HOSPITAL NAME

Westwood Regional
VH

REFERRING VET

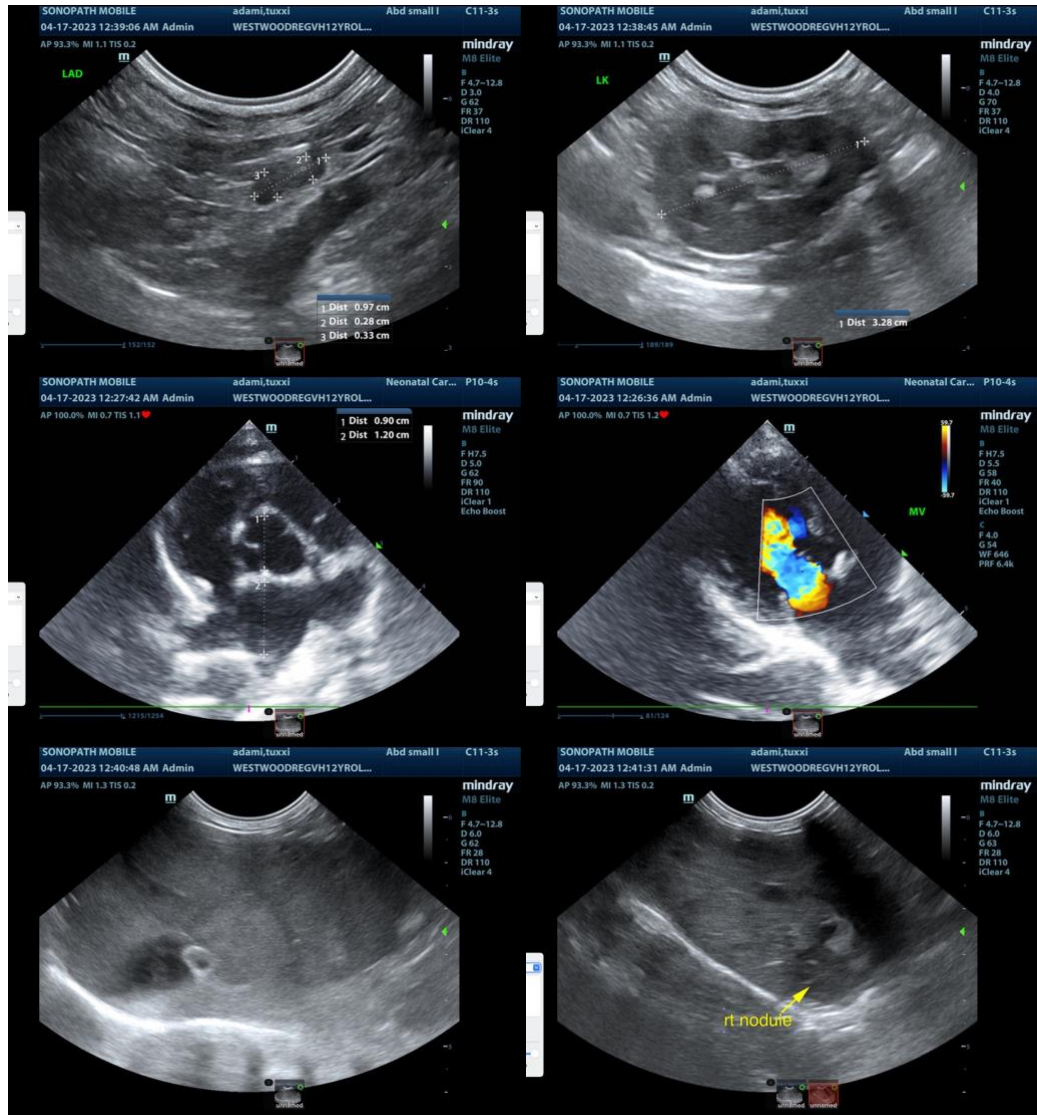
Dr. Hartwick

INVOICE

22064

DATE

4/17/23



The information and recommendations provided are based on the images presented by the referring veterinarian. 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.

Eric Lindquist, DMV, DABVP, Cert. IVUSS, CEO of SonoPath.com
info@SonoPath.com