



PATIENT

Douglas Werbel

SPECIES

Feline

BREED

Domestic Shorthair

SEX

Neutered male

AGE

11 years

WEIGHT

16.14 lbs

INTERPRETED BY

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

**IMAGING
PERFORMED BY**

Kelly Vazquez, CVT

HOSPITAL NAME

Marsh Hospital for
Animals

REFERRING VET

Dr. Milwicki

INVOICE

42740

DATE

2/13/23

PRESENTING CLINICAL SIGNS

History: History of asthma and heart murmur. Follow up double cavity ultrasound, no new clinical issues. Current meds: Flovent, Albuterol, and Gabapentin. ECG: Heart rate 176 bpm, sinus rhythm, no pathologic arrhythmias or abnormal ECG measurements noted. Mild cardiac enlargement noted on radiograph, primarily left atrium

ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN

Urinary System

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 was noted. Ureteral papillae were normal.

The **kidneys** revealed largely normal size and structure, corticomedullary definition and ratio (cortex 1/3 of medulla) were essentially maintained with some 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 right kidney measured 4.0 cm. The left kidney measured 4.22 cm.

Adrenal Glands

Both **adrenal glands** were 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 0.27 cm.

Spleen

The **spleen** in this patient was mildly enlarged with uniform parenchyma and was folded upon itself cranially. This is a positional variant and is not pathological. There was no evidence of significant disease. The spleen measured 0.9 cm.

Liver

The **liver** was mildly enlarged, yet uniform. The gallbladder presented acceptably thin walls with primarily anechoic content. The cystic and common bile ducts were normal. No pathological hepatic lymphadenopathy was evident. No overt structural evidence of inflammatory, infiltrative or regenerative pathology was evident.



PATIENT

Gastrointestinal

Douglas Werbel

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.

SPECIES

Feline

BREED

Domestic Shorthair

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.

SEX

Neutered male

ULTRASONOGRAPHIC EXAMINATION OF THE HEART

AGE

11 years

The **left atrium** was enlarged. The **mitral** valve revealed insufficiency measuring 5.0 m/sec. The **left ventricle** presented normal thicknesses with linear contour and was not dilated nor restricted. **Myocardial** remodeling was noted. **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** was mildly enlarged with **tricuspid** insufficiency. 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. The cranial **mediastinum and pericardial regions** were free of masses in the visible window. A large amount of thoracic fat was noted in this patient.

WEIGHT

16.14 lbs

INTERPRETED BY

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

IMAGING PERFORMED BY

Kelly Vazquez, CVT

HOSPITAL NAME

Marsh Hospital for
Animals

REFERRING VET

Dr. Milwicki

INVOICE

42740

DATE

2/13/23

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		120	0.57	1.56	0.57	33	65
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	1.7	1.9	2.0 max			0.77	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							



PATIENT

Douglas Werbel

ULTRASONOGRAPHIC FINDINGS

Stable geriatric abdomen.

SPECIES

Feline

Mitral insufficiency and mild left atrial enlargement.

Myocardial remodeling similar to the prior sonogram.

BREED

Domestic Shorthair

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

There was no evidence of significant abdominal pathology.

SEX

Neutered male

The cardiac presentation appears to be most consistent with primary bronchial disease; however, there is left atrial enlargement and some cardiac component to the patient's clinical status may be playing a role. I recommend ace inhibitor in this patient at 0.5 mg/kg s.i.d. Consideration of low-dose Lasix trial is recommended at 6.25 mg b.i.d. and assessment of the clinical signs. Recheck is recommended of BUN, creatinine and blood pressure as well as target respiratory rate (less than 25/minute). Plavix therapy is debatable, but can be considered. Recheck echocardiogram is recommended in a month.

AGE

11 years

WEIGHT

16.14 lbs

INTERPRETED BY

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

IMAGING PERFORMED BY

Kelly Vazquez, CVT

HOSPITAL NAME

Marsh Hospital for
Animals

REFERRING VET

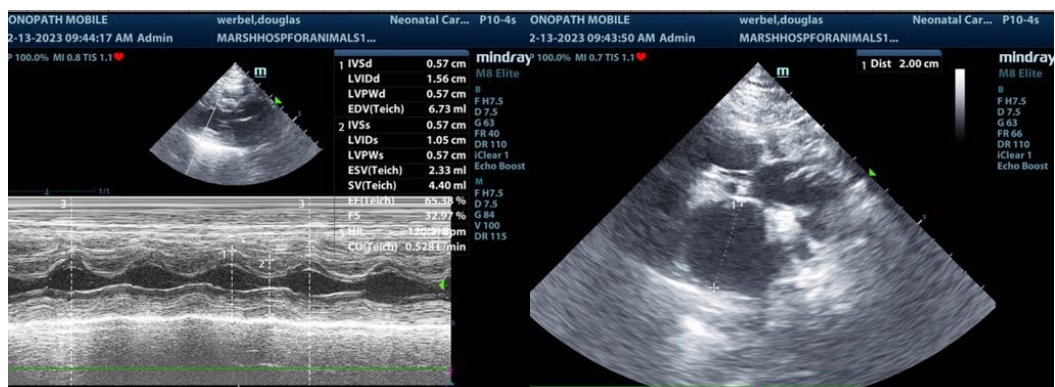
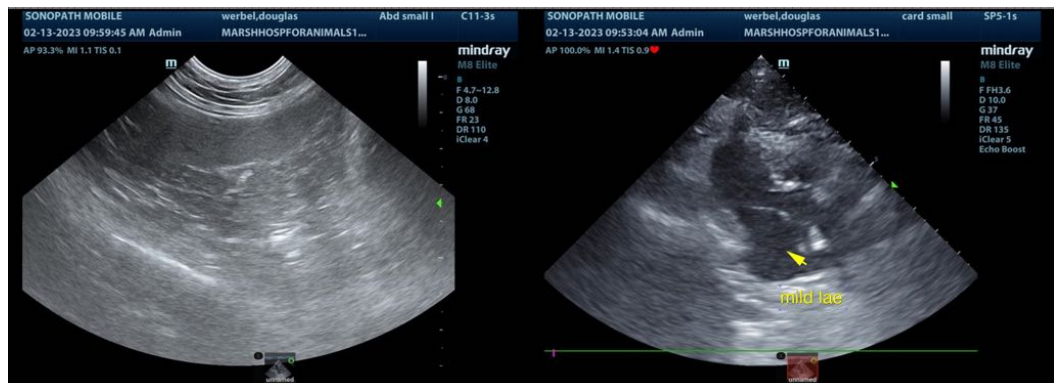
Dr. Milwicki

INVOICE

42740

DATE

2/13/23





PATIENT

Douglas Werbel

SPECIES

Feline

BREED

Domestic Shorthair

SEX

Neutered male

AGE

11 years

WEIGHT

16.14 lbs

INTERPRETED BY

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

IMAGING PERFORMED BY

Kelly Vazquez, CVT

HOSPITAL NAME

Marsh Hospital for
Animals

REFERRING VET

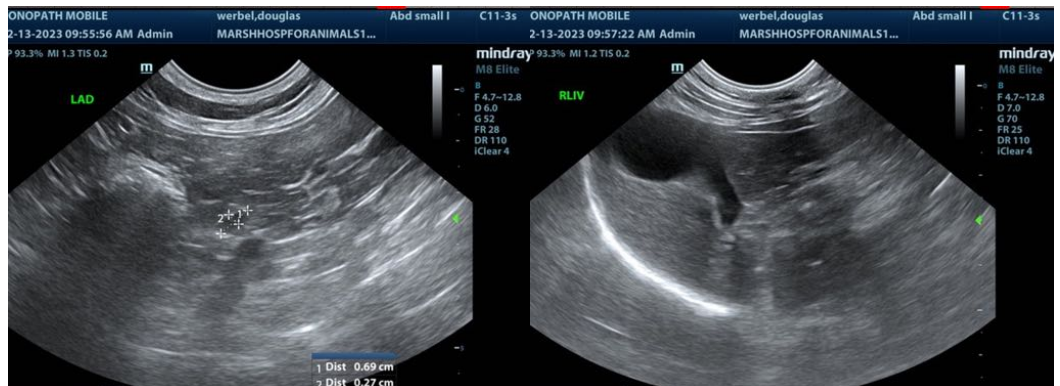
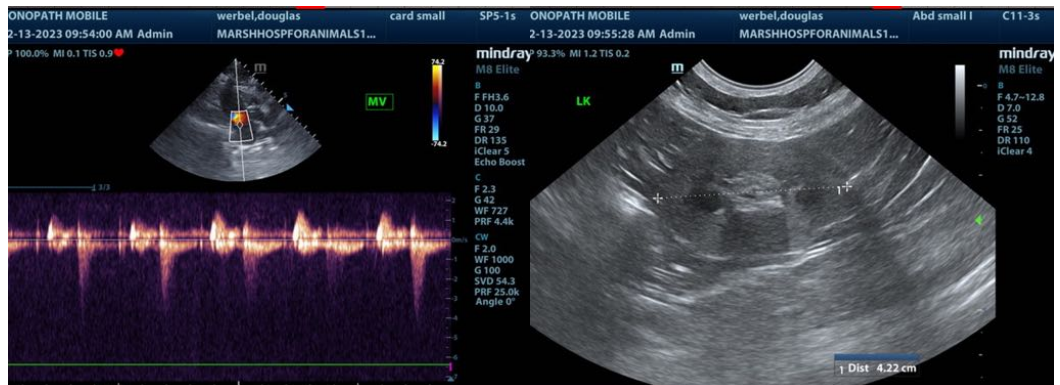
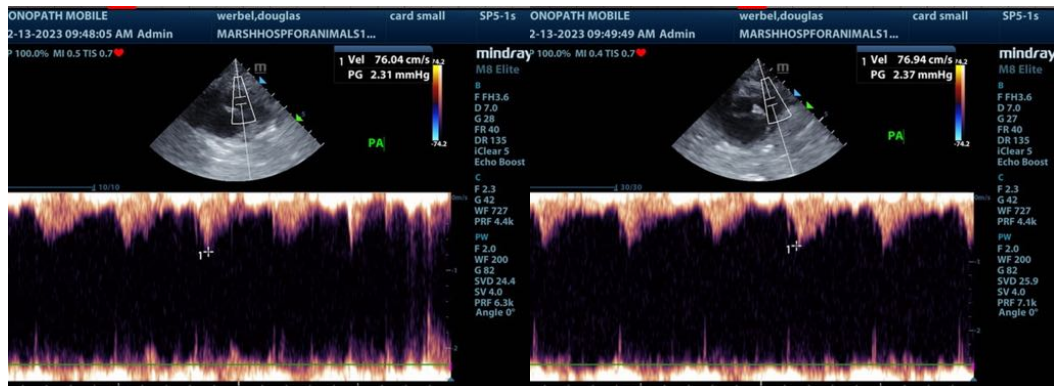
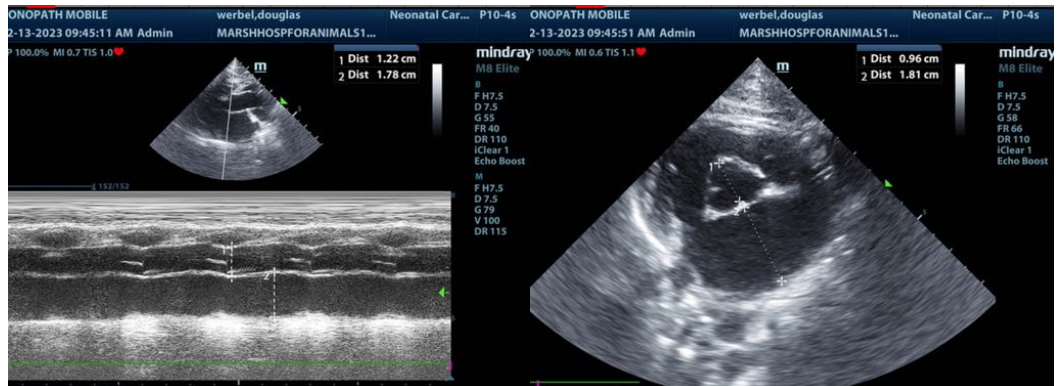
Dr. Milwicki

INVOICE

42740

DATE

2/13/23





PATIENT

Douglas Werbel

SPECIES

Feline

BREED

Domestic Shorthair

SEX

Neutered male

AGE

11 years

WEIGHT

16.14 lbs

INTERPRETED BY

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

IMAGING PERFORMED BY

Kelly Vazquez, CVT

HOSPITAL NAME

Marsh Hospital for
Animals

REFERRING VET

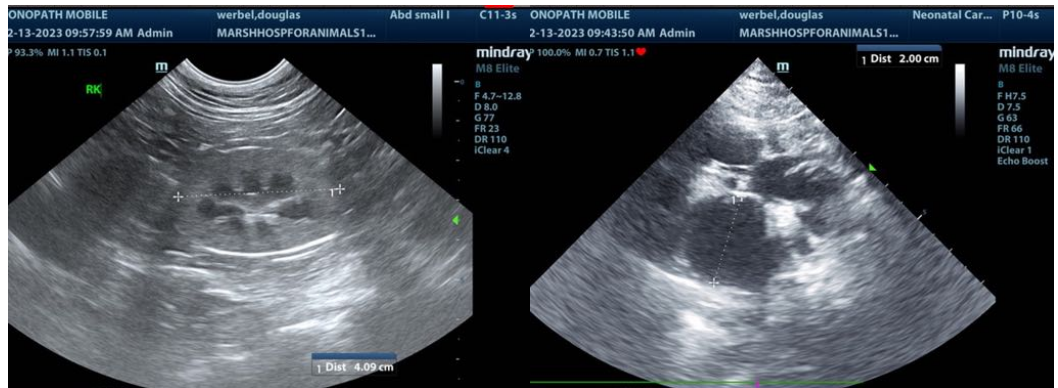
Dr. Milwicki

INVOICE

42740

DATE

2/13/23



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.

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

Info@SonoPath.com