



**PATIENT**

Riley Yacenda

**PRESENTING CLINICAL SIGNS**

History: Disorientation episodes / syncope. Susp of heart mass / check spleen and liver  
 Abnormal PE/Chem/CBC/UA Results: WNL

**SPECIES**

Canine

**ULTRASONOGRAPHIC EXAMINATION OF THE HEART**

**BREED**

Golden Retriever

The echocardiogram in this patient demonstrated normal **left atrial** size based on 3 separate methods of LA evaluation. Trivial **mitral** valve insufficiency was noted. 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 auricular** base revealed a mural nodule that measured 3.5 x 2.3 cm. This is visible in multiple views. **Tricuspid** valvular assessment demonstrated adequate linear morphology and kinesis. 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). No visible **pericardial** or free pleura fluid was noted.

**SEX**

Neutered male

**AGE**

9 years

**WEIGHT**

93 lbs

**INTERPRETED BY**

Eric Lindquist, DMV  
 DABVP, Cert. IVUSS

**IMAGING PERFORMED BY**

Jessica Miller

**HOSPITAL NAME**

All Creatures Great and Small

**REFERRING VET**

Dr. Ashmore

**INVOICE**

42568

**DATE**

2/6/23

CANINE CARDIAC PARAMETERS	MR VMAX (m/s)	TR VMAX (m/s)	LA/AO (Boon method)	LA/AO (Heart Base;)	FS (%)	EF (%)	EPSS (cm)
NORMAL PARAMETER	4.5-5.5	<2.7	1.3	<1.6	28-40	40-100	<0.6
PATIENT			1.14	1.32	51	83	NM
CANINE CARDIAC PARAMETERS	HR (BPM)	AV VMAX (m/s)	PV MAX (m/s)	BODY WEIGHT	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	BELOW	BELOW	BELOW	BELOW
PATIENT	150	2.07	1.11	93 lbs		3.43	



**PATIENT**

Riley Yacenda

**SPECIES**

Canine

**BREED**

Golden Retriever

**SEX**

Neutered male

**AGE**

9 years

**WEIGHT**

93 lbs

**INTERPRETED BY**

Eric Lindquist, DMV  
DABVP, Cert. IVUSS

**IMAGING PERFORMED BY**

Jessica Miller

**HOSPITAL NAME**

All Creatures Great  
and Small

**REFERRING VET**

Dr. Ashmore

**INVOICE**

42568

**DATE**

2/6/23

**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 normal size and structure, corticomedullary definition and ratio for this age. The cortices presented largely uniform texture with normal echogenic relationship to liver and spleen. Medullary structure differed distinctly from the cortex and no evidence of pelvic dilation was present. The capsules were acceptably uniform without significant irregularities. The right kidney measured 6.72 cm. The left kidney measured 7.66 cm.

**Adrenal Glands**

The left adrenal gland was enlarged and irregular measuring 4.4 x 1.34 cm at the caudal pole and 0.83 cm at the cranial pole. The right adrenal gland was uniform and measured 3.8 cm in length x 1.5 cm at the cranial pole and 0.88 cm at the caudal pole.

**Spleen**

The **spleen** revealed multi-focal, hypoechoic nodular changes. The largest nodule measured 1.36 cm at the cranial pole.

**Liver**

The **liver** images from right and left intercostal as well as subcostal views revealed subjectively normal liver size, contour, and structure. Some age-related parenchymal remodeling was noted but likely not clinically significant at this time. Vascular and biliary tracts were of normal volume and no evidence of congestion was noted. The gallbladder presented some dependent debris with essentially normal contour. The cystic and common bile ducts were normal. No overt evidence of active inflammatory, infiltrative or regenerative pathology was noted but should be paired with current or past LE elevations regarding any clinical significance to this presentation. The hepatic lymph nodes were unremarkable.

**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.



**PATIENT**

**Pancreas**

Riley Yacenda

The base and limbs of the **pancreas** were observed to be largely isoechoic to surrounding omental fat. Some parenchymal remodeling, however, with mild deviation from curvilinear normalcy was observed. Pancreatic duct and capsular irregularities were present consistent with age related changes. If pain upon imaging (+ Murphy sign) was present or if the patient is focally painful in subxiphoid palpation then low-grade smoldering chronic pancreatitis should be suspected.

**SPECIES**

Canine

**BREED**

**ULTRASONOGRAPHIC FINDINGS**

Golden Retriever

Micronodular splenic changes. Hyperplasia versus hemangiosarcoma, round cell neoplasia is possible, yet less likely.

**SEX**

Enlarged, irregular left adrenal gland. Hyperplasia, pheochromocytoma and carcinoma is all possible.

Neutered male

No abdominal effusion was noted.

**AGE**

Right auricular mural nodule. The position is strongly suggestive for hemangiosarcoma. Round cell neoplasia is possible.

9 years

No pericardial or pleural effusion was noted.

**WEIGHT**

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

93 lbs

Serial blood pressure measurements are warranted. If hypertension is present then urine catecholamine is indicated. 25-gauge FNA of the splenic nodules can be considered. Given the patient's history CNS and thoracic CT would be ideal in this patient with contrast. Holter monitor is warranted to assess for arrhythmia given the syncope and disorientation episodes. The prognosis is very guarded.

**INTERPRETED BY**

Eric Lindquist, DMV  
DABVP, Cert. IVUSS

**IMAGING PERFORMED BY**

Jessica Miller

**HOSPITAL NAME**

All Creatures Great  
and Small

**REFERRING VET**

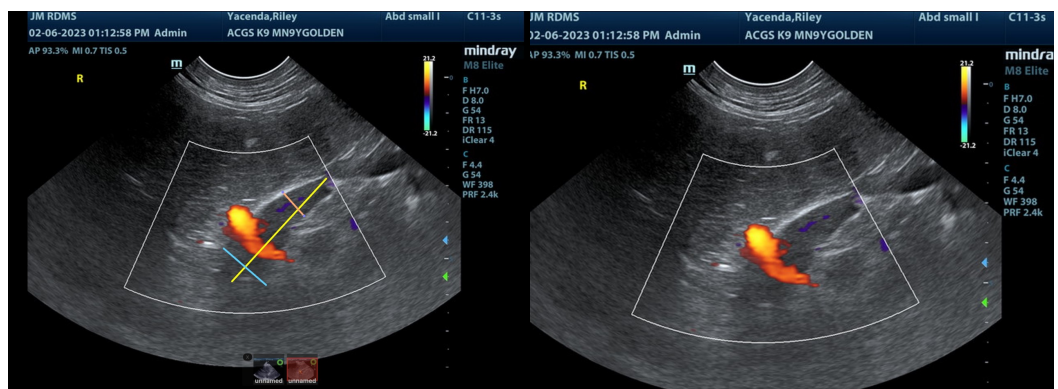
Dr. Ashmore

**INVOICE**

42568

**DATE**

2/6/23





**PATIENT**

Riley Yacenda

**SPECIES**

Canine

**BREED**

Golden Retriever

**SEX**

Neutered male

**AGE**

9 years

**WEIGHT**

93 lbs

**INTERPRETED BY**

Eric Lindquist, DMV  
DABVP, Cert. IVUSS

**IMAGING PERFORMED BY**

Jessica Miller

**HOSPITAL NAME**

All Creatures Great  
and Small

**REFERRING VET**

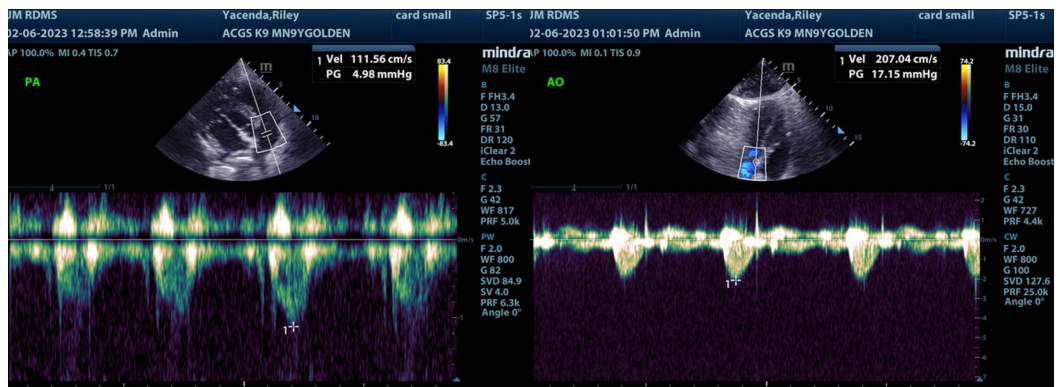
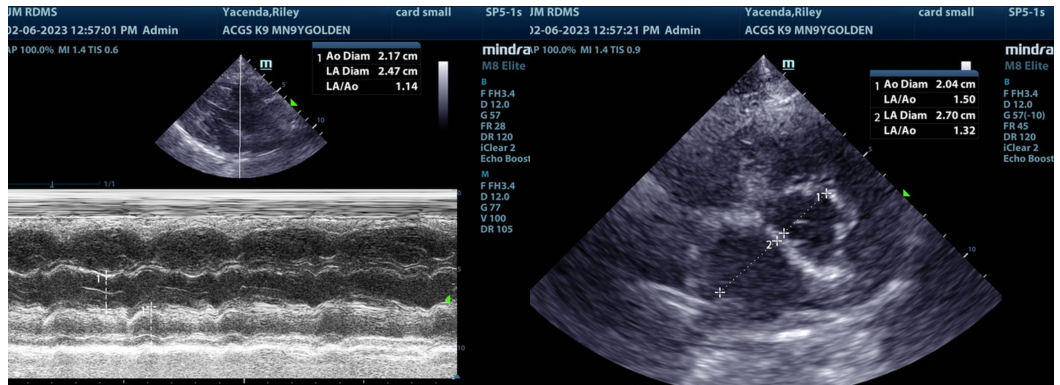
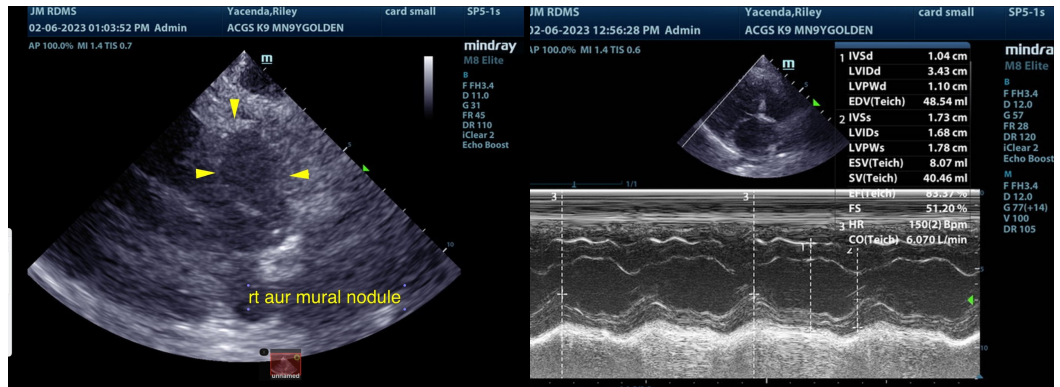
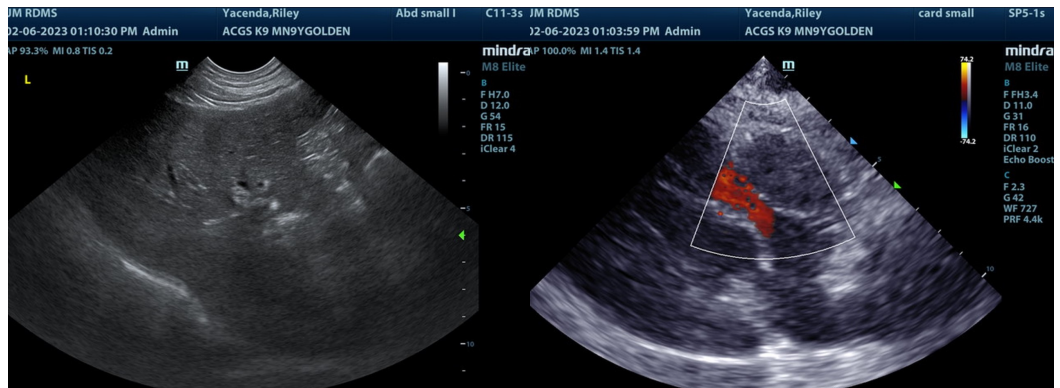
Dr. Ashmore

**INVOICE**

42568

**DATE**

2/6/23





**PATIENT**

Riley Yacenda

**SPECIES**

Canine

**BREED**

Golden Retriever

**SEX**

Neutered male

**AGE**

9 years

**WEIGHT**

93 lbs

**INTERPRETED BY**

Eric Lindquist, DMV  
DABVP, Cert. IVUSS

**IMAGING PERFORMED BY**

Jessica Miller

**HOSPITAL NAME**

All Creatures Great  
and Small

**REFERRING VET**

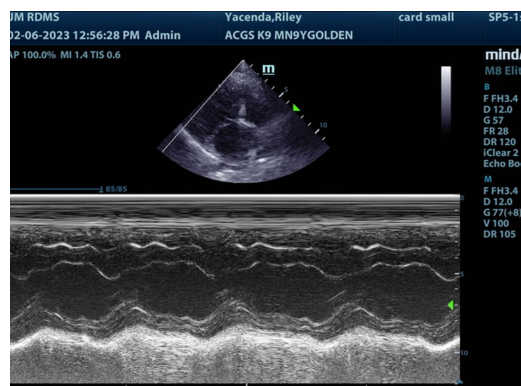
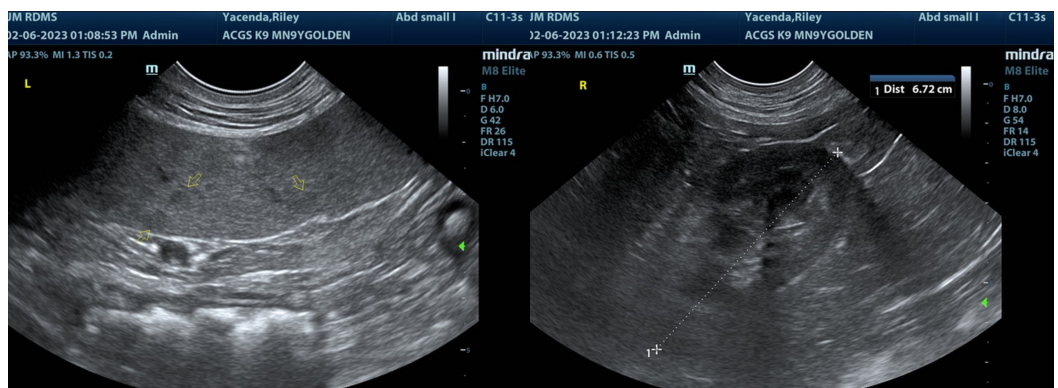
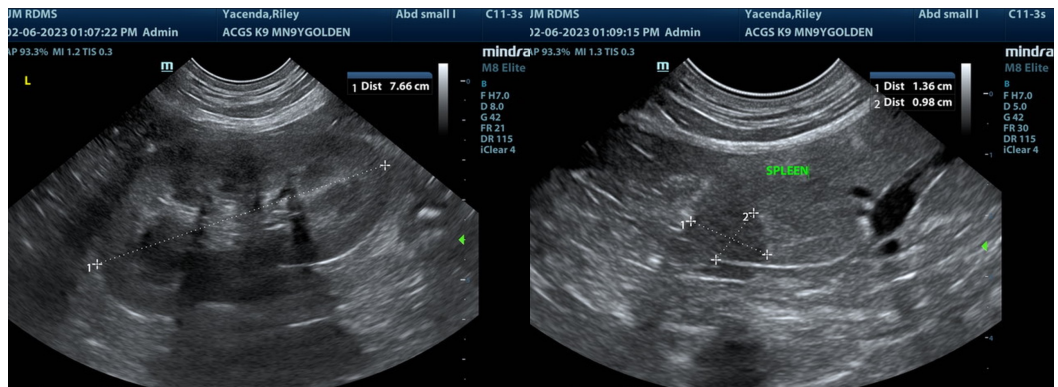
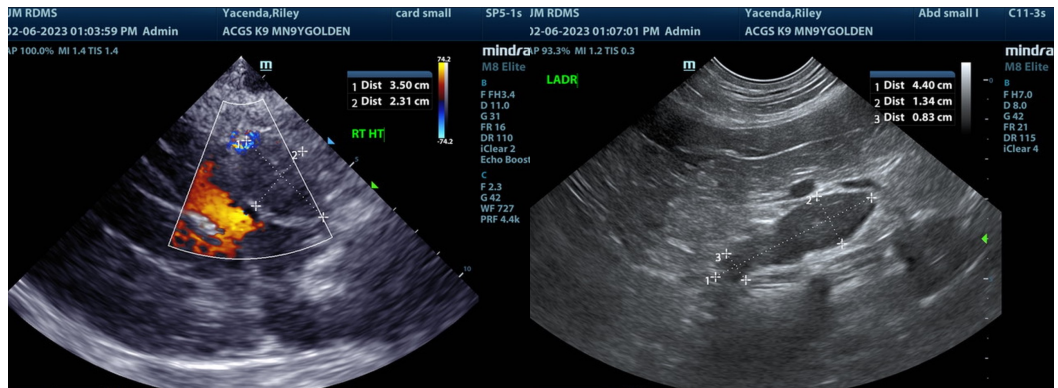
Dr. Ashmore

**INVOICE**

42568

**DATE**

2/6/23





**PATIENT**

Riley Yacenda

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.

**BREED**

Golden Retriever

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

**SEX**

Neutered male

**AGE**

9 years

**WEIGHT**

93 lbs

**INTERPRETED BY**

Eric Lindquist, DMV  
DABVP, Cert. IVUSS

**IMAGING  
PERFORMED BY**

Jessica Miller

**HOSPITAL NAME**

All Creatures Great  
and Small

**REFERRING VET**

Dr. Ashmore

**INVOICE**

42568

**DATE**

2/6/23