

PATIENT

Claire Mackin

PRESENTING CLINICAL SIGNS

Lethargic, Lyme positive, had bronchitis either reverse sneezing or coughing. Decreased appetite.
ALT 171, ALKP 377, MCH 26, HGB 20.8, MPV 13.5, urine specific gravity 1.008

SPECIES

Canine

ULTRASONOGRAPHIC EXAMINATION OF THE HEART

BREED

Pit Bull Mix

The echocardiogram in this patient demonstrated normal **left atrial** size based on 3 separate methods of LA evaluation. The cranial and caudal **mitral** valve leaflets presented normal linear structure, extension in systole, and union in diastole with normal kinesis. 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. **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. The cranial **mediastinum and pericardial and extra-cardiac regions** were free of masses in the visible window.

SEX

Spayed female

AGE

12 years

INTERPRETED BY

Eric Lindquist, DMV
DABVP, Cert. IVUSS

IMAGING PERFORMED BY

Eric Lindquist, DMV
DABVP, Cert. IVUSS

HOSPITAL NAME

Animal Care Center of
Flanders

REFERRING VET

Dr. Hallihan

INVOICE

42447

DATE

1/31/23

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			1.1	1.3	57	87	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	BELOW	BELOW	BELOW	BELOW
PATIENT	153	1.68	1.42			4.22	



PATIENT

Claire Mackin

SPECIES

Canine

BREED

Pit Bull Mix

SEX

Spayed female

AGE

12 years

INTERPRETED BY

Eric Lindquist, DMV
DABVP, Cert. IVUSS

IMAGING PERFORMED BY

Eric Lindquist, DMV
DABVP, Cert. IVUSS

HOSPITAL NAME

Animal Care Center of
Flanders

REFERRING VET

Dr. Hallihan

INVOICE

42447

DATE

1/31/23

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 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 left kidney measured 6.32 cm. The right kidney measured 6.08 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 2.37 x 0.7 cm. The right adrenal gland measured 2.68 x 0.95 cm at the cranial pole and 0.86 cm at the caudal pole.

Spleen

The **spleen** was mildly enlarged with subtle heterogenous, parenchymal changes. The spleen was folded upon itself. This is consistent with reactive hyperplasia. If weight loss is present then FNA is indicated.

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



PATIENT

Claire Mackin

demonstrated normal luminal chyme and stool consistency respectively. No obstructive or overt infiltrative disease was noted. No associated abnormal lymphatic activity was noted.

SPECIES

Canine

Pancreas

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.

BREED

Pit Bull Mix

SEX

Spayed female

ULTRASONOGRAPHIC FINDINGS

Minor hypersplenism.

Age related renal, hepatic and pancreatic changes.

AGE

12 years

Normal echocardiogram.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

If any weight loss is an issue then FNA of the spleen is indicated. Palpation of the spleen is warranted to assess for any discomfort. However, otherwise the abdomen does not present any evidence of significant disease.

INTERPRETED BY

Eric Lindquist, DMV
DABVP, Cert. IVUSS

IMAGING PERFORMED BY

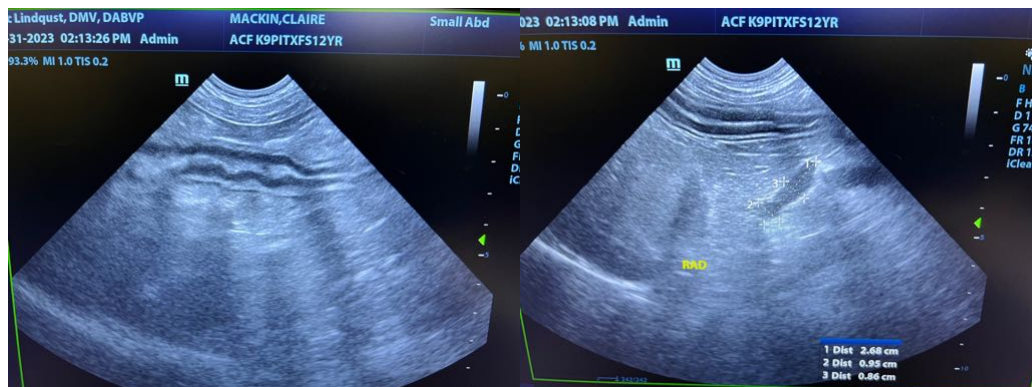
Eric Lindquist, DMV
DABVP, Cert. IVUSS

HOSPITAL NAME

Animal Care Center of
Flanders

REFERRING VET

Dr. Hallihan



INVOICE

42447

DATE

1/31/23



PATIENT

Claire Mackin

SPECIES

Canine

BREED

Pit Bull Mix

SEX

Spayed female

AGE

12 years

INTERPRETED BY

Eric Lindquist, DMV
DABVP, Cert. IVUSS

IMAGING PERFORMED BY

Eric Lindquist, DMV
DABVP, Cert. IVUSS

HOSPITAL NAME

Animal Care Center of
Flanders

REFERRING VET

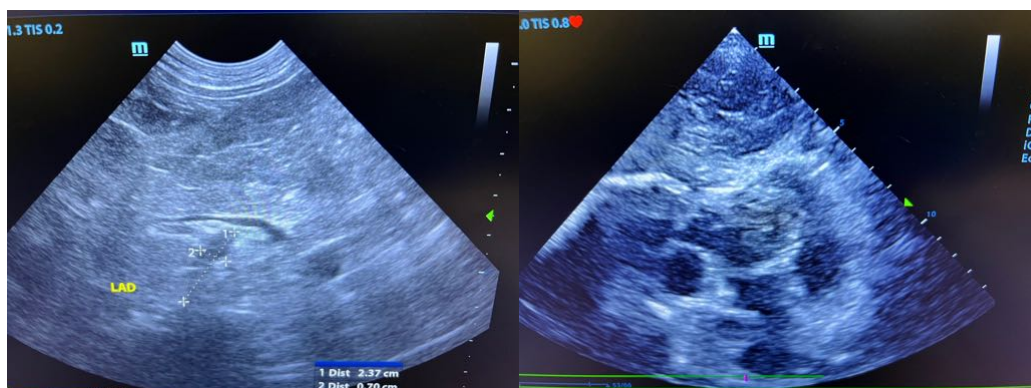
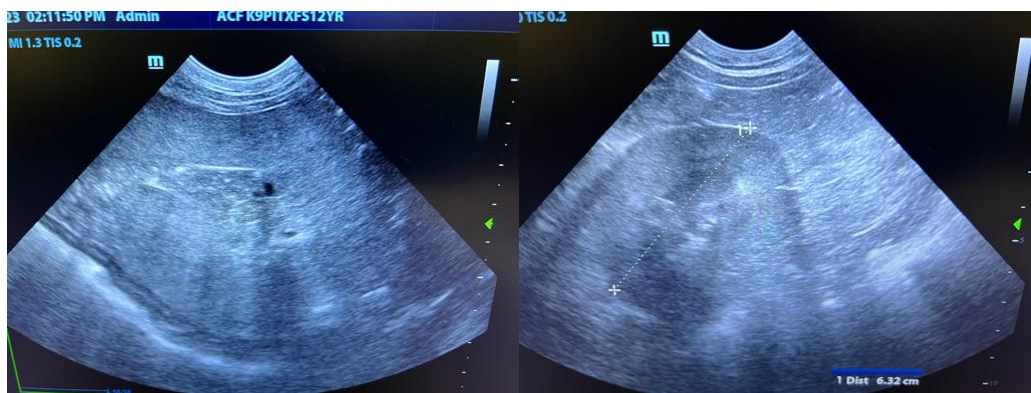
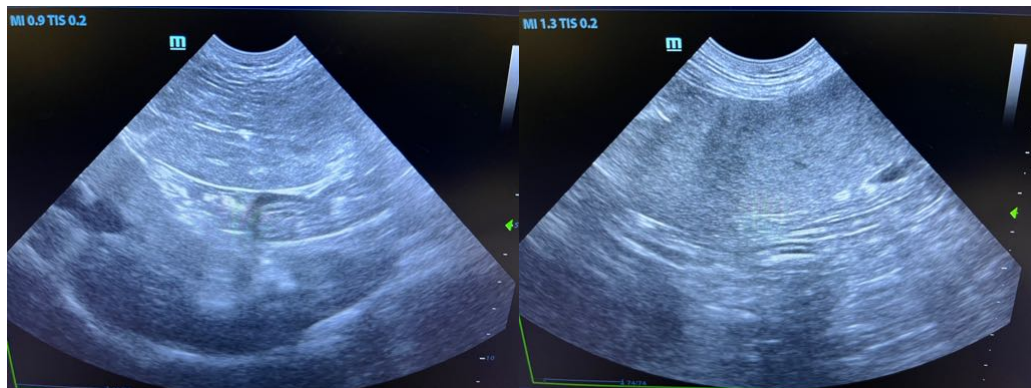
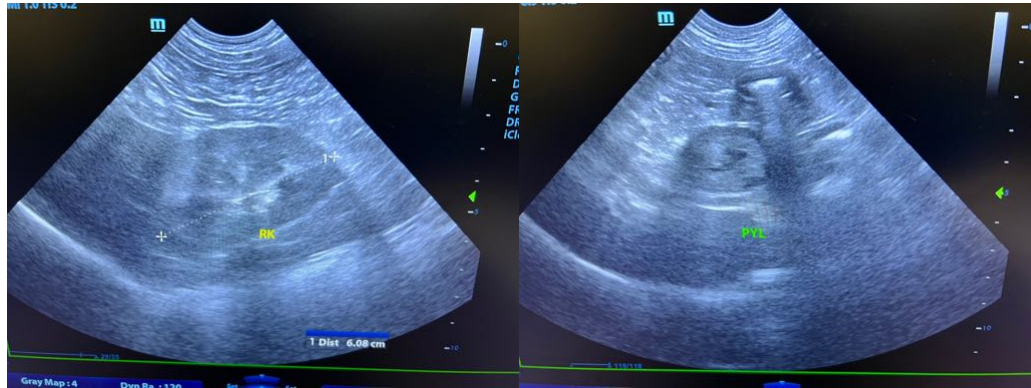
Dr. Hallihan

INVOICE

42447

DATE

1/31/23





PATIENT

Claire Mackin

SPECIES

Canine

BREED

Pit Bull Mix

SEX

Spayed female

AGE

12 years

INTERPRETED BY

Eric Lindquist, DMV
DABVP, Cert. IVUSS

IMAGING PERFORMED BY

Eric Lindquist, DMV
DABVP, Cert. IVUSS

HOSPITAL NAME

Animal Care Center of
Flanders

REFERRING VET

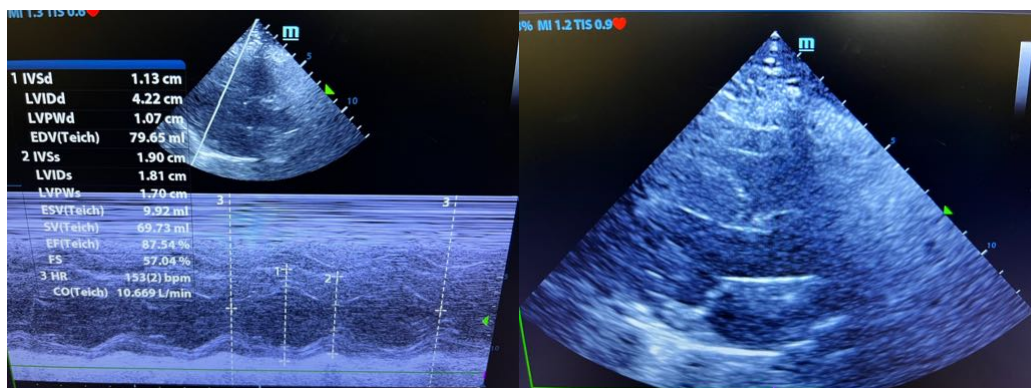
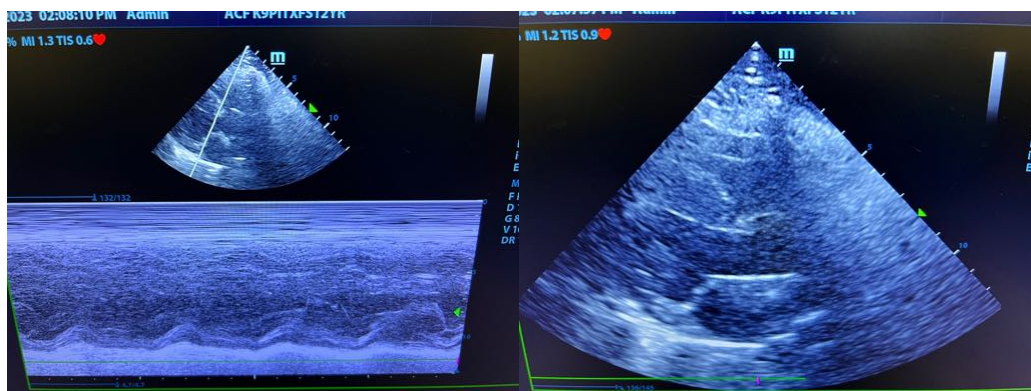
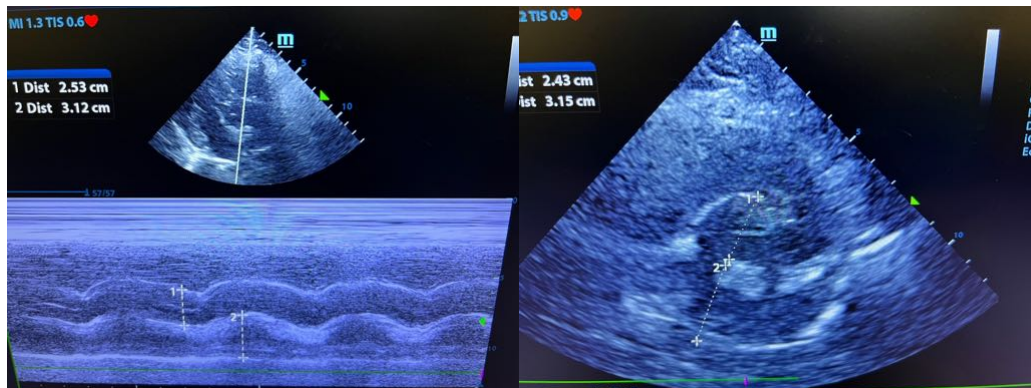
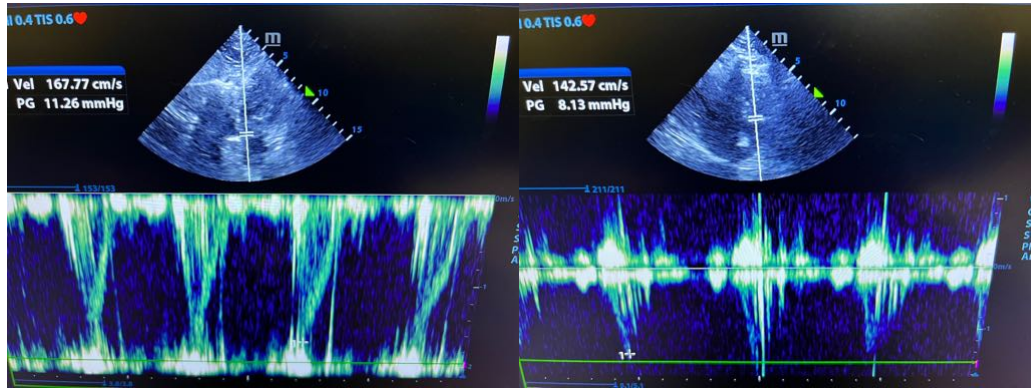
Dr. Hallihan

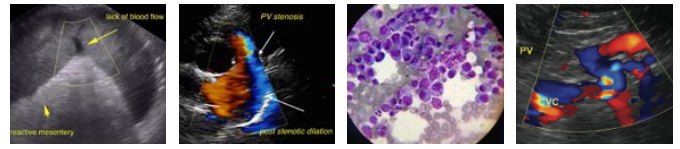
INVOICE

42447

DATE

1/31/23





PATIENT

Claire Mackin

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

Pit Bull Mix

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

SEX

Spayed female

AGE

12 years

INTERPRETED BY

Eric Lindquist, DMV
DABVP, Cert. IVUSS

**IMAGING
PERFORMED BY**

Eric Lindquist, DMV
DABVP, Cert. IVUSS

HOSPITAL NAME

Animal Care Center of
Flanders

REFERRING VET

Dr. Hallihan

INVOICE

42447

DATE

1/31/23