


PATIENT

Addison Miller

SPECIES

Canine

BREED

Border Collie

SEX

Spayed female

AGE

13 years

WEIGHT

35 pounds

INTERPRETED BY

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

IMAGING PERFORMED BY
 Jessica Miller

HOSPITAL NAME

ACC Flanders

REFERRING VET

Dr. Hallihan

INVOICE

10098ag

DATE

03/01/2022

PRESENTING CLINICAL SIGNS

History: Early Renal? Hypertensive, episodes of paleness at home. Current meds: Denamarin- 1T SID, Rimadyl 75mg 1T SID

Abnormal PE/Chem/CBC/UA Results: SDMA 16, BUN 33, ALP 343, Cholesterol 444, Lipase 821, Creat Kinase 251, Lymphocyte 990

ULTRASONOGRAPHIC EXAMINATION OF THE HEART AND ABDOMEN

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	5.3	<1		1.1	42.9	77.3	0.27
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		1.6	1.0		3.4	3.5	

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 vegetative 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 minor thickening with mild TV 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. No echographically detectable evidence of infiltrative disease was visible. The cranial mediastinum and pericardial regions were free of masses in the visible window.



PATIENT

Urinary System

Addison Miller

The urinary bladder, trigone, cystourethral junction, and visible pelvic urethra to a depth of 3 cm exhibited normal thickness and tone. Anechoic urine was present in the lumen with no uroliths or sediment. The ureteral papillae were normal. The ureters were not visible which is normal. No evidence of inflammatory or neoplastic changes were noted.

SPECIES

Canine

Normal size and margination was present in the kidneys. A normal 1:3 cortex / medulla ratio was maintained. The medulla and cortices were uniform in texture with some mild to moderately increased echogenicity and mild to moderate loss of corticomedullary symmetry and definition expected for the age of the patient. No evidence of pelvic dilation was present. The left kidney measured 5.9 cm in length. The right kidney measured 5.9 cm in length.

BREED

Border Collie

The area of the aortic trifurcation is free of pathology.

SEX

Adrenal Glands

Spayed female

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 2.0 cm width in the cranial pole and 0.55 cm width in the caudal pole. The right adrenal gland measured 2.5 cm width in the cranial pole and 0.71 cm width in the caudal pole.

AGE

13 years

Spleen

WEIGHT

35 pounds

The spleen exhibited primarily finely textured parenchyma which was hyperechoic to the liver and renal cortical parenchyma. Mild generalized parenchyma heterogeneity was present without evidence of nodular changes. 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. The parenchymal heterogeneity is likely consistent with benign changes such as extramedullary hematopoiesis or age-related remodeling with minor potential for inflammatory or neoplastic disease.

INTERPRETED BY

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

Liver

The liver was subjectively normal in size, structure, and contour. The liver parenchyma was mildly nonuniform and hypoechoic to the spleen with a moderate coarse echotexture and subjective mild to benign parenchymal remodeling. The hepatic and portal vasculature were normal in appearance without signs of congestion. The gall bladder was non distended in size with thin walls and primarily anechoic luminal content. The common bile ducts were normal.

IMAGING PERFORMED BY
Jessica Miller

Gastrointestinal

HOSPITAL NAME

ACC Flanders

The stomach presented intact wall layering with a normal wall layer ratio. The lumen of the stomach contained mild nonshadowing ingesta without signs of obstruction or foreign material.

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.

REFERRING VET

Dr. Hallihan

Normal visible colon wall layers were present with apparent formed feces in lumen.

Pancreas

INVOICE

10098ag

The pancreas was normal in size and contour with isoechoic to heterogeneous parenchyma compared to adjacent omentum. No signs of active inflammation or neoplasia.

DATE

03/01/2022



PATIENT

Free Abdomen

Addison Miller

No omental masses, lymphadenopathy or effusion.

SPECIES

Canine

BREED

Border Collie

SEX

Spayed female

AGE

13 years

WEIGHT

35 pounds

INTERPRETED BY

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

IMAGING PERFORMED BY
Jessica Miller

HOSPITAL NAME

ACC Flanders

REFERRING VET

Dr. Hallihan

INVOICE

10098ag

DATE

03/01/2022

ULTRASONOGRAPHIC FINDINGS

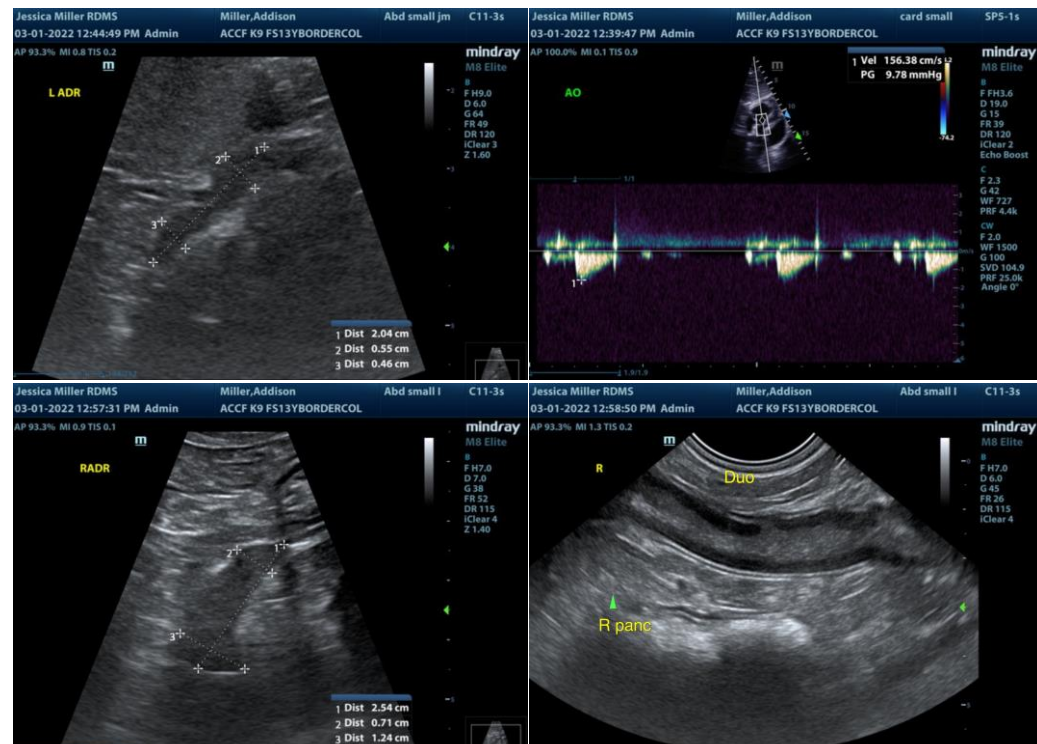
- Compensated chronic mitral valve disease (ACVIM B1).
- Mild TR-estimated pulmonary pressure gradient not consistent with clinical pulmonary hypertension.
- Mild to moderate chronic renal changes.
- Hepatopathy exhibiting mild parenchymal remodeling-subjectively benign.
- Heterogeneous pancreas-parenchymal remodeling owing to age/patient variant. Low grade to chronic pancreatitis possible.
- Mild gastric ingesta, sonographically unremarkable small bowel.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Largely geriatric abdomen without evidence of significant visceral pathology. Overall hepatic presentation is consistent with benign likely chronic hepatopathy. Potential for low grade to chronic pancreatitis would be suspected if evidence of cranial abdominal or subxiphoid discomfort on palpation.

Hepatosupportive medications may prove beneficial. Further renal staging to include urine C/S and protein: creatinine ratio on sterile urine sample may be considered.

If persistent or significant hypertension or if evidence of proteinuria based on further renal staging, ACE inhibitor medication could be considered.





PATIENT

Addison Miller

SPECIES

Canine

BREED

Border Collie

SEX

Spayed female

AGE

13 years

WEIGHT

35 pounds

INTERPRETED BY

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

IMAGING PERFORMED BY
Jessica Miller

HOSPITAL NAME

ACC Flanders

REFERRING VET

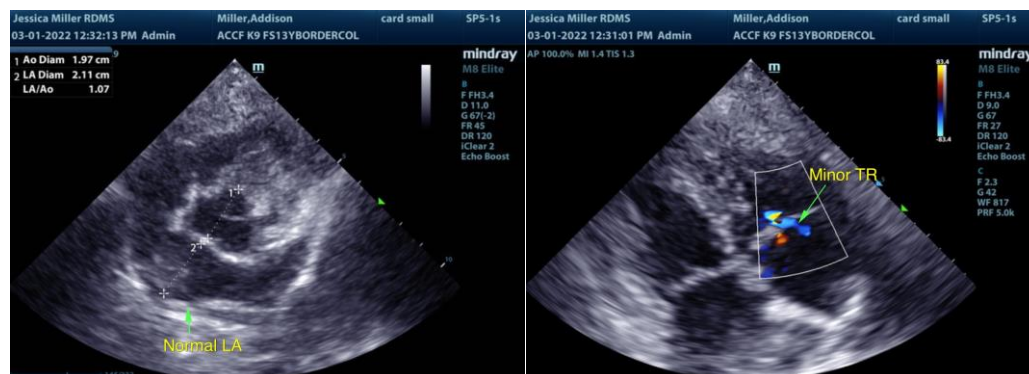
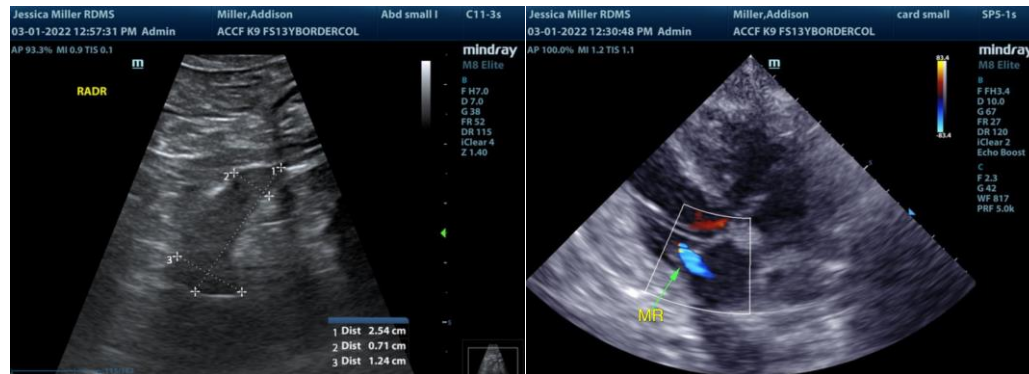
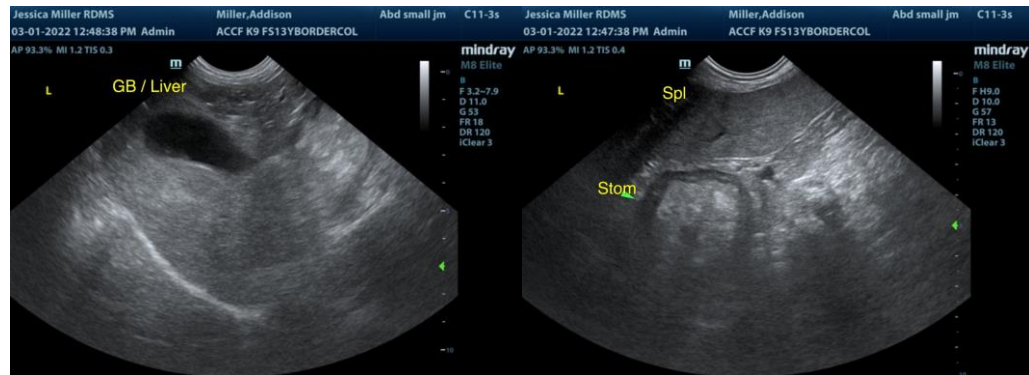
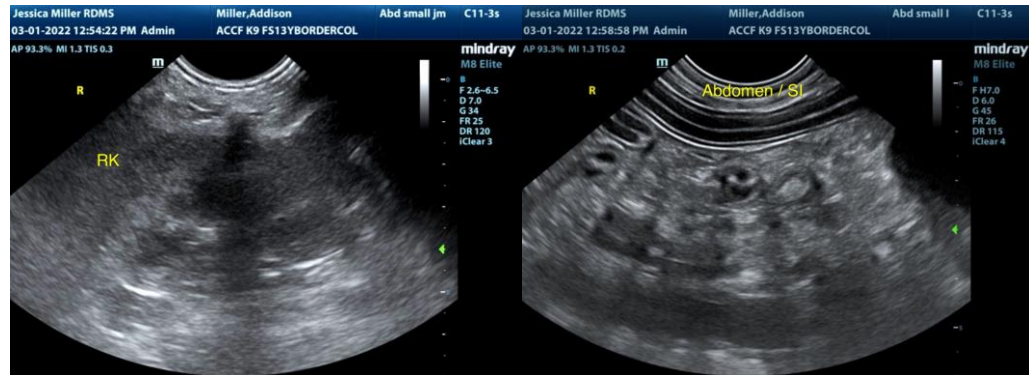
Dr. Hallihan

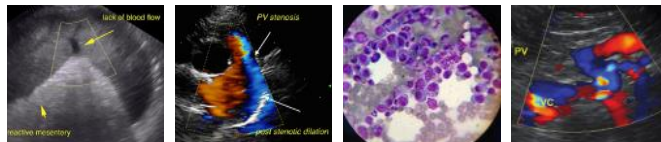
INVOICE

10098ag

DATE

03/01/2022





PATIENT

Addison Miller

SPECIES

Canine

BREED

Border Collie

SEX

Spayed female

AGE

13 years

WEIGHT

35 pounds

INTERPRETED BY

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

**IMAGING
PERFORMED BY**

Jessica Miller

HOSPITAL NAME

ACC Flanders

REFERRING VET

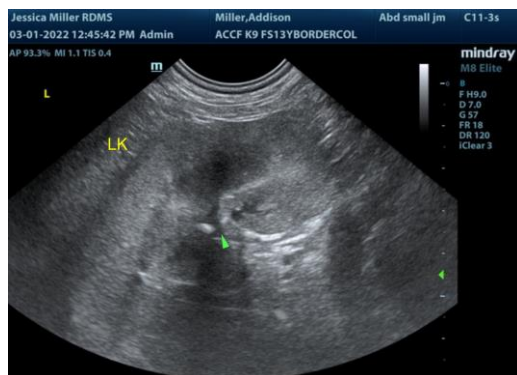
Dr. Hallihan

INVOICE

10098ag

DATE

03/01/2022



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