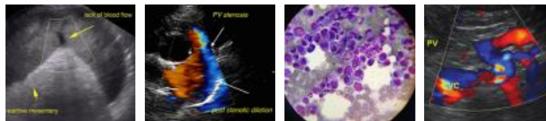
SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™
1-800-838-4268 info@sonopath.com SonoPath.com



ANIMAL SOUNDS NW
MOBILE VETERINARY ULTRASOUND
IMAGING PERFORMED BY
AnimalSoundsNW.com 541-357-9423

PATIENT

Tasha James

SPECIES

Canine

BREED

Yorkshire Terrier

SEX

FS

AGE

13yr

WEIGHT

7lb

INTERPRETED BY

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

IMAGING PERFORMED BY

Jenna Walsh CVT

HOSPITAL NAME

Countryside Animal Clinic

REFERRING VET

Dr. Cox

INVOICE

13034ag

DATE

02/20/2023

PRESENTING CLINICAL SIGNS

Heart murmur, distended abdomen, history of pancreatitis Heart Rate and Respiratory Rates Heart Rate: 140, Respiratory Rate: 48 Blood Pressure Measurments None available

Current Medications Trazodone 50mg 1/4 tab PRN before bedtime

Radiographic Findings Enlarged liver Primary Question/Differential to Be Answered in This Exam Evaluate cardiac and abdominal condition

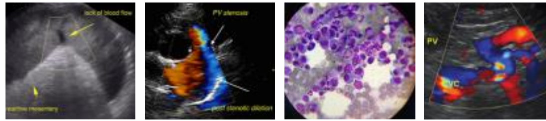
ULTRASONOGRAPHIC EXAMINATION OF THE ABDOMEN AND HEART

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	<1.3	28-40	40-100	<0.6
PATIENT			1.4	1.4	50	85	0.2
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				
PATIENT	NM	1.2	0.9		2.0	2.2	

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 mild thickening consistent with endocardiosis. 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 adequate linear morphology. 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.

Urinary System



PATIENT

Tasha James

SPECIES

Canine

BREED

Yorkshire Terrier

SEX

FS

AGE

13yr

WEIGHT

7lb

INTERPRETED BY

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

IMAGING PERFORMED BY

Jenna Walsh CVT

HOSPITAL NAME

Countryside Animal Clinic

REFERRING VET

Dr. Cox

INVOICE

13034ag

DATE

02/20/2023

The urinary bladder, trigone, cystourethral junction, and visible pelvic urethra to a depth of 2 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.

Normal size and margination were present in the kidneys. A normal 1:3 cortex / medulla ratio was maintained. The medulla and cortices were uniform in texture with some 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 3.4 cm in length. The right kidney measured 3.8 cm in length.

The area of the aortic trifurcation was free of pathology.

The area of the iliac trifurcation was free of pathology including no evidence of medial, iliac or sublumbar lymphadenopathy.

Adrenal Glands

Bilateral symmetrical adrenal gland enlargement with uniformly hypoechoic parenchyma was present. The left adrenal gland measured 0.81 cm width at the caudal pole and 1.7 cm length. The right adrenal gland measured 0.68 cm width at the caudal pole and 1.6 cm length.

Spleen

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.

Liver/Gallbladder

The liver was moderately enlarged with symmetrical capsule contour and non-uniform increased parenchymal echogenicity. Potential for intermittent hyperechoic nodules likely consistent with areas of hyperplasia or lipogranulomas. The hepatic and portal vasculature were normal in appearance without signs of congestion. The gallbladder was non-distended in size with thin walls and primarily anechoic luminal content with mild non-dependent mobile echogenic debris. The cystic and common bile ducts were normal.

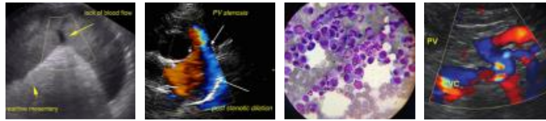
Gastrointestinal

The stomach presented intact wall layering with a normal wall layer ratio. The lumen of the stomach was empty with no signs of ileus, obstruction or foreign material.

The duodenum exhibited intact prominent wall layering extending to the level of the duodenal flexure and upper jejunum. The jejunum and ileum to the level of the colon exhibited overtly 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.

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

Pancreas



PATIENT

Tasha James

SPECIES

Canine

BREED

Yorkshire Terrier

SEX

FS

AGE

13yr

WEIGHT

7lb

INTERPRETED BY

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

IMAGING PERFORMED BY

Jenna Walsh CVT

HOSPITAL NAME

Countryside Animal Clinic

REFERRING VET

Dr. Cox

INVOICE

13034ag

DATE

02/20/2023

The pancreas base and right limb exhibited moderate irregular enlargement with capsule asymmetry and non-homogenous hypoechoic parenchyma compared to the adjacent omental fat. Associated peripancreatic/perihepatic to generalized mild peritoneal free fluid was present.

Free Abdomen

No omental masses or overt lymphadenopathy was present.

Peripancreatic/perihepatic to generalized mild peritoneal free fluid was present.

ULTRASONOGRAPHIC FINDINGS

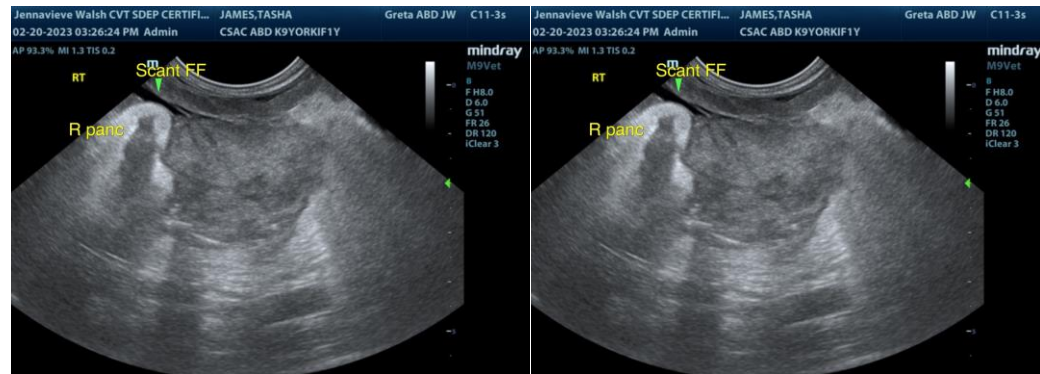
- Normal echocardiogram
- Enlarged irregular hypoechoic pancreas base/right pancreatic limb-persistent active to chronic active pancreatitis, potential for neoplastic criteria
- Hepatomegaly exhibiting non-uniform parenchyma hyperechogenicity
- Mild gallbladder debris (non-mucocele)
- Bilateral chronic renal changes
- Non-specific bilateral mild adrenomegaly-not overtly suggestive of neoplastic criteria, stress of benign hyperplasia likely
- Regional peripancreatic hyperechoic omentum with associated scant to mild volume peritoneal free fluid

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

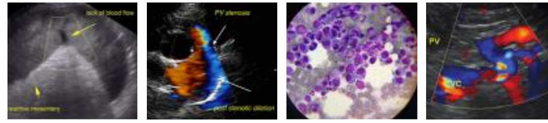
A definitive cause of the murmur was not obvious yet may be associated with mild non-obvious MR. The hemodynamic effects of the murmur appear to be mild. No indication for cardiac medications. Conservative monitoring of the murmur recommended with potential recheck echocardiogram in 6-12 months, sooner if clinical signs arise.

Assuming normal clotting status and using a 25g needle, hepatic and pancreatic FNA for screening cytology could be considered for further assessment. A full adrenal workup with ACTH stim given concurrent pancreatitis may be considered if clinical signs suggestive of Cushing's syndrome are present. A screening BP is recommended.

If possible, abdominal effusion cytology +/- C/S to assess for evidence of associated peritonitis or neoplastic criteria may be considered.



SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™
1-800-838-4268 info@sonopath.com SonoPath.com



ANIMAL SOUNDS NW
MOBILE VETERINARY ULTRASOUND
IMAGING PERFORMED BY
AnimalSoundsNW.com 541-357-9423

PATIENT

Tasha James

SPECIES

Canine

BREED

Yorkshire Terrier

SEX

FS

AGE

13yr

WEIGHT

7lb

INTERPRETED BY

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

IMAGING PERFORMED BY

Jenna Walsh CVT

HOSPITAL NAME

Countryside Animal Clinic

REFERRING VET

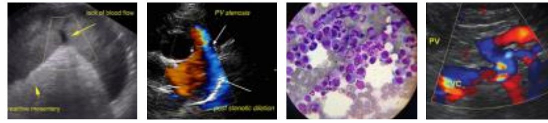
Dr. Cox

INVOICE

13034ag

DATE

02/20/2023



PATIENT

Tasha James

SPECIES

Canine

BREED

Yorkshire Terrier

SEX

FS

AGE

13yr

WEIGHT

7lb

INTERPRETED BY

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

IMAGING PERFORMED BY

Jenna Walsh CVT

HOSPITAL NAME

Countryside Animal Clinic

REFERRING VET

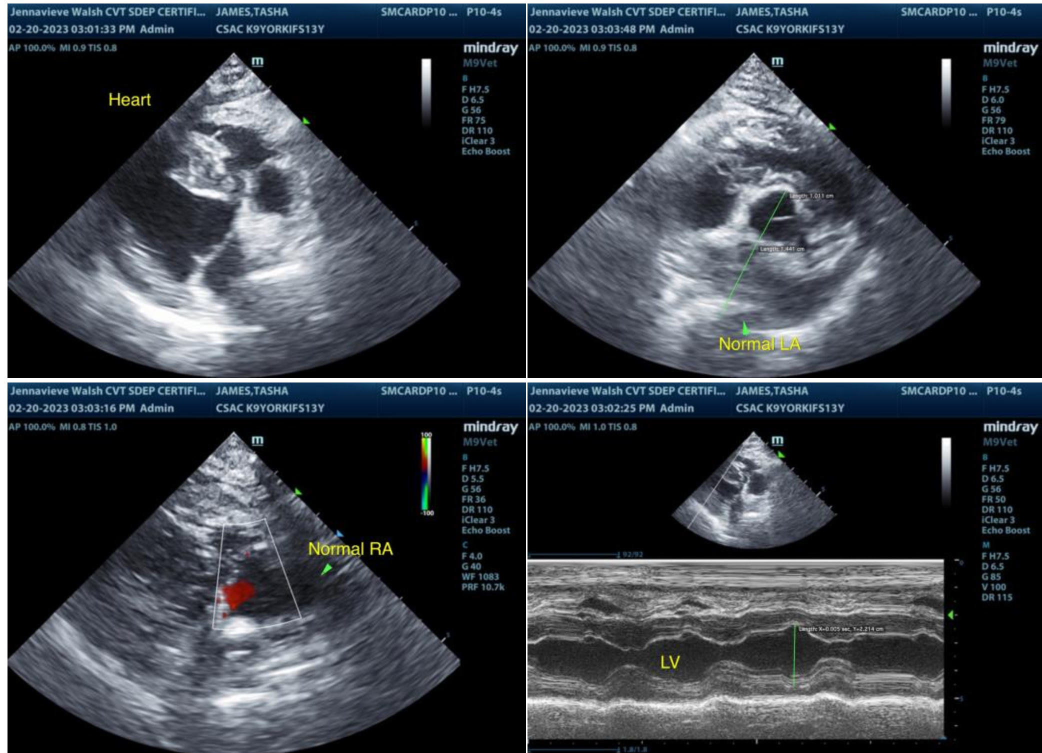
Dr. Cox

INVOICE

13034ag

DATE

02/20/2023



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