



PATIENT

Toby Chua-Eoan

SPECIES

Canine

BREED

Mix

SEX

MN

AGE

11 years

WEIGHT

40 lbs.

INTERPRETED BY

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

IMAGING PERFORMED BY

Shari Reffi, CVT

HOSPITAL NAME

Marsh

REFERRING VET

Dr. Milwicki

INVOICE

14845

DATE

8/17/23

PRESENTING CLINICAL SIGNS

New patient, Hx of pancreatitis 2018. DJD. On routine exam, note left anal gland mass-(cytology pending). Current meds: Gabapentin

Abnormal PE/Chem/CBC/UA Results: ALT 278; AST 58; ALP 277 (new finding)

ULTRASONOGRAPHIC EXAMINATION OF THE HEART & ABDOMEN

CANINE	MR	TR	LA/AO	LA/AO	FS	EF	EPSS
CARDIAC PARAMETERS	VMAX (m/s)	VMAX (m/s)	(Boon method) (m/s)	(Heart Base; Swe) (m/s)	(%)	(%)	(cm)
NORMAL PARAMETER	4.5-5.5	<2.7	1.3	<1.3	28-40	40-100	<0.6
PATIENT			1.1	1.1	35	68	0.28
CANINE	HR	AV	PV	BODY WEIGHT	LA	LVIDd	LVIDs
CARDIAC PARAMETERS	(BPM)	VMAX (m/s)	MAX (m/s)	(kg)	2D short axis Base view (cm)	Avg; 2D and m-mode short axis (cm)	Avg; 2D and m-mode short axis (cm)
NORMAL PARAMETER	50-100	0.7-1.7	0.7-1.6				
PATIENT	91	1.0	1.4		3.4	3.0	

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 mild endocardiosis. No evidence of valvular prolapse noted. Doppler indicated measurable eccentric to centralized insufficiency. The **left ventricle** presented normal 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. Normal measured LVOT velocity noted with minor aortic insufficiency on Doppler. The **right atrium** and auricle revealed normal size, structure and content. No evidence of masses was noted or chamber overload. **Tricuspid** valvular assessment demonstrated mild thickening with mild TR on Doppler. 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). Normal measured RVOT velocity noted with minor pulmonic insufficiency on Doppler. 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

Toby Chua-Eoan

The urinary bladder, trigone, and cystourethral junction 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 was noted.

SPECIES

Canine

There was no overt pathology in the area of the residual prostate.

BREED

Mix

Several yet variably enlarged, irregular, nonhomogeneous, possibly mildly cystic medial iliac lymph nodes were present and exhibited abnormal width: length ratio (>0.5). An example measured 4.1 cm x 2.9 cm.

SEX

MN

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 loss of corticomedullary symmetry and definition expected for the age of the patient. No evidence of pelvic dilation was present. The left kidney measured 5.0 cm in length. The right kidney measured 5.0 cm in length.

AGE

11 years

Adrenal Glands

WEIGHT

40 lbs.

The left adrenal gland was uniform in size and contour with a uniformly hypoechoic parenchyma. The left adrenal gland measured 2.5 cm length x 0.52 cm width at the caudal pole. The right adrenal gland was uniform in size and contour with a uniformly hypoechoic parenchyma. The right adrenal gland measured 2.5 cm length x 0.59 cm width at the caudal pole.

INTERPRETED BY

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

Spleen

IMAGING PERFORMED BY

Shari Reffi, CVT

The spleen exhibited primarily finely textured and homogenous parenchyma which was hyperechoic to the liver and renal cortical parenchyma. A nondisruptive hyperechoic nodule was present in the mid-lateral splenic parenchyma, consistent with a small benign myelolipoma. 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. Acute to chronic inflammatory or neoplastic changes were not noted. The hyperechoic nodules tend to trend benign and are most consistent with benign hyperplasia or myelolipomas. There was no evidence of splenic neoplastic criteria.

HOSPITAL NAME

Marsh

Liver/ Gallbladder

REFERRING VET

Dr. Milwicki

The liver was subjectively normal in size, structure, and contour. The liver parenchyma was uniform and hypoechoic to the spleen with a mild coarse echotexture. The hepatic and portal vasculature were normal in appearance without signs of congestion. The gallbladder was non-distended in size containing anechoic content with moderate, nonorganized gallbladder debris. The cystic and common bile ducts were normal.

INVOICE

14845

Gastrointestinal

DATE

8/17/23

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 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.

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



PATIENT

Pancreas

Toby Chua-Eoan

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

SPECIES

Canine

Free Abdomen

BREED

Mix

No overt omental lymphadenopathy or masses were noted. There was no evidence of peritoneal effusion. An irregular, nonhomogeneous, mass was noted in the area of the left anal sac measuring approximately 3.8 cm in diameter.

SEX

MN

ULTRASONOGRAPHIC FINDINGS

AGE

11 years

- Compensated MR (ACVIM B1)
- TR - no evidence of clinical pulmonary hypertension
- Minor aortic and pulmonic insufficiency
- Left anal sac mass
- Enlarged nonhomogeneous medial iliac lymph nodes - strongly suggestive of lymphatic neoplastic criteria, given the presence of anal sac mass and pending cytology
- Nonspecific yet sonographically benign hepatopathy
- Gallbladder sediment (non-mucocele)
- Pancreatic remodeling - age/patient variant, remodeling owing to previous inflammation, mild chronic pancreatitis possible

WEIGHT

40 lbs.

INTERPRETED BY

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

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

IMAGING PERFORMED BY

Shari Reffi, CVT

There is no indication for cardiac medications as the hemodynamic effects of the valvular insufficiencies are minimal, given no evidence of left or right heart chamber enlargement. There are no anesthetic contraindications. Recheck echocardiogram is recommended in 6-12 months, sooner if clinical signs arise.

HOSPITAL NAME

Marsh

Pending anal sac mass cytology, FNA cytology of an accessible enlarged medial iliac lymph node, assuming normal clotting status, is recommended for further staging. There was no other evidence of intrabdominal or retroperitoneal primary or metastatic neoplastic criteria.

REFERRING VET

Dr. Milwicki

Concurrent screening hepatic FNA cytology could be considered for further clarification, primarily to assess for evidence of inflammatory criteria. Hepatosupportive medications including Denamarin and Ursodiol may prove beneficial.

INVOICE

14845

DATE

8/17/23



PATIENT

Toby Chua-Eoan

SPECIES

Canine

BREED

Mix

SEX

MN

AGE

11 years

WEIGHT

40 lbs.

INTERPRETED BY

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

IMAGING PERFORMED BY

Shari Reffi, CVT

HOSPITAL NAME

Marsh

REFERRING VET

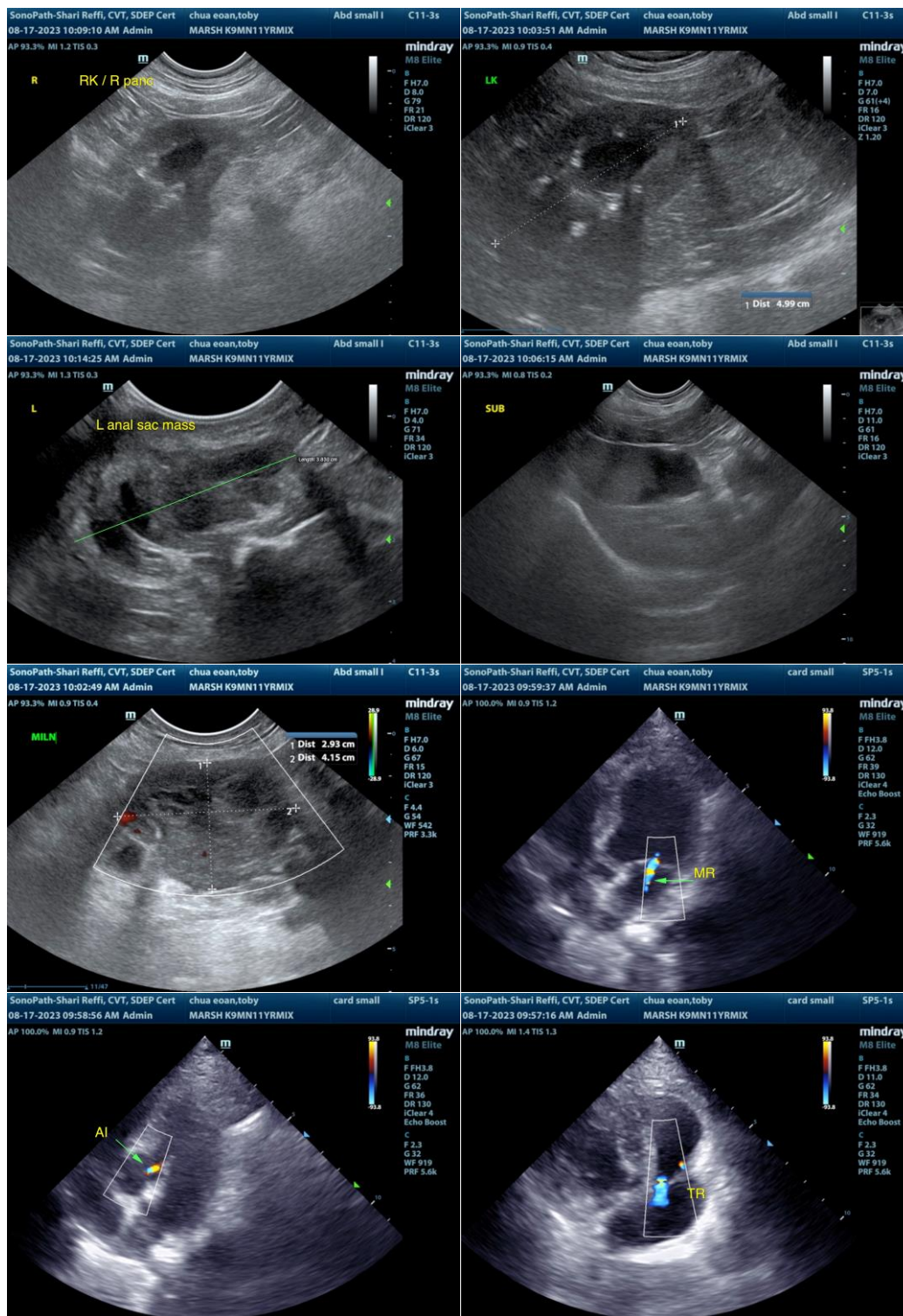
Dr. Milwicki

INVOICE

14845

DATE

8/17/23





PATIENT

Toby Chua-Eoan

SPECIES

Canine

BREED

Mix

SEX

MN

AGE

11 years

WEIGHT

40 lbs.

INTERPRETED BY

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

IMAGING PERFORMED BY

Shari Reffi, CVT

HOSPITAL NAME

Marsh

REFERRING VET

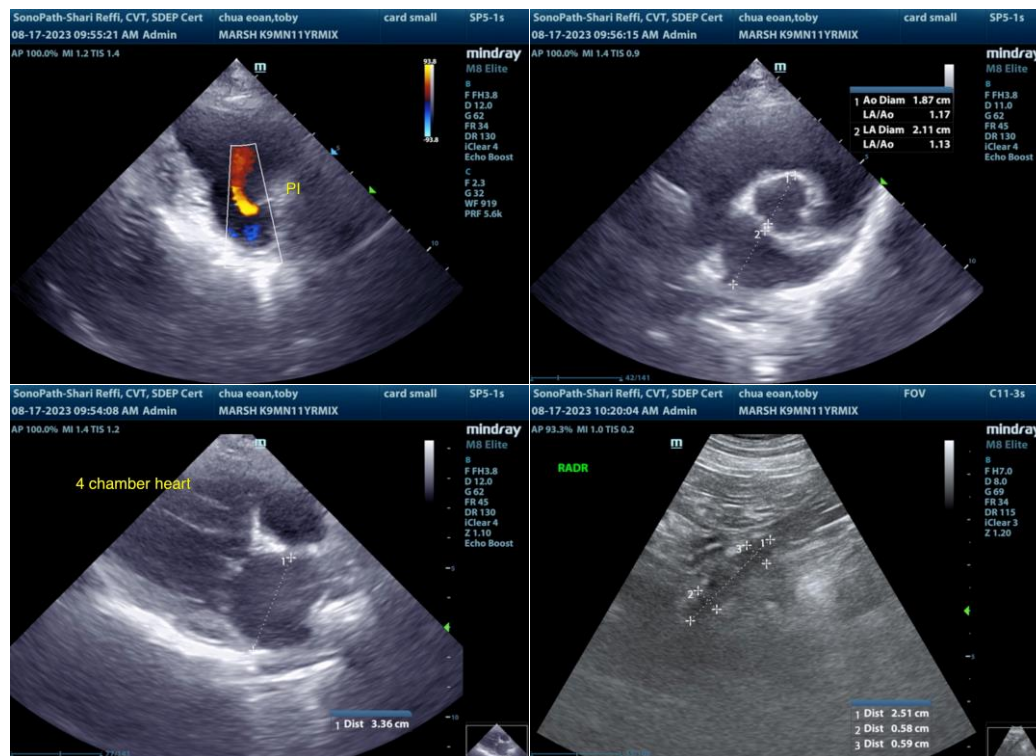
Dr. Milwicki

INVOICE

14845

DATE

8/17/23



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 I can be of any further assistance, please contact me.

R. McKenzie Daniel, DVM, DABVP (Canine/Feline Practice)

info@sonopath.com