



PATIENT

Penny Shogren

SPECIES

Canine

BREED

Basset Hound

SEX

Female Spayed

AGE

~13 years

WEIGHT

33lbs

INTERPRETED BY

Maggie Machen Lamy,
DVM, DACVIM
(Cardiology)

IMAGING PERFORMED BY

Loetitia St-Jacques,
LVT/RVT

HOSPITAL NAME

Mountian View
Animal Hospital

REFERRING VET

Dr. Kalivoda

INVOICE

21080

DATE

9/16/21

PRESENTING CLINICAL SIGNS

History: Progressive grade 3/6 R apical systolic heart murmur. Assess prior to anesthesia.
-Current medications: Vetprofen for pain and chlorhex for cleaning open/infected cysts.
*Highly stressed during the echo; torb administered prior to the ECG.

RADIOGRAPHIC FINDINGS *NOTE: Images submitted for supplemental cardiac information only.
Normal cardiac silhouette. No obvious evidence of CHF.

ELECTROCARDIOGRAPHIC FINDINGS

A six lead ECG is available at 50mm/s; 10mm/mV. The average heart rate is 140bpm (range 70-188bpm). Dramatic rate variation throughout; however, periods of tachycardia appear sinus in origin. P for every QRS complex and vice versa. The P wave morphology is positive with a normal dimension. Normal PR. The QRS morphology is positive with normal dimension. MEA is normal. No ectopic beats, pauses or dysrhythmias observed.
ECG diagnosis: Suspect a sinus rhythm with profound heart rate variability.

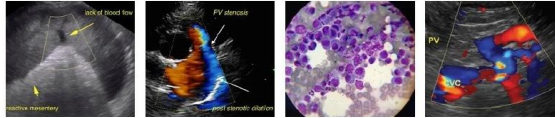
ECHOCARDIOGRAM FINDINGS

2D, m-mode, color flow and doppler imaging is available. Mild mitral valve leaflet thickening with no obvious prolapse into the left atrial lumen. No mitral regurgitation is identified. Normal left atrial dimension. Normal LV diameter with normal myocardial function. The tricuspid valve appears subjectively normal. Mild TR. Normal TR velocity. The right heart is normal. No overt evidence of pulmonary arterial hypertension. The pulmonic and aortic valves are normal in morphology and mobility. No aortic abnormalities identified, with normal outflow velocity. Normal pulmonic outflow velocities. No aortic insufficiency. No pulmonic insufficiency. No pericardial or pleural effusion noted. No cardiac tumors observed.

CARDIAC CHART

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	NA	2.8	NM	1.1	40	73	NM
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	NM	1.1	1.1	15.0	2.8	3.0	1.8
*Normal chamber parameters expressed as a mean value (SD)				3	1.27 (5.3)	2.46 (2.46)	1.36 (5.5)
BODY WEIGHT DEPENDENT PARAMETERS				5	1.40 (4.5)	2.74 (5.2)	1.60 (4.7)
*Note: All measurements based upon multi-modal images and methods. An average value is reported.				10	1.50 (3.8)	3.27 (3.5)	2.06 (3.1)
				15	1.83 (2.0)	3.71 (2.4)	2.43 (2.1)
				20	2.02 (1.9)	4.14 (2.2)	2.80 (2.0)
				25	2.18 (2.4)	4.48 (2.9)	3.10 (2.5)
				30	2.33 (3.3)	4.83 (3.9)	3.39 (3.4)
				35	2.48 (4.3)	5.17 (5.0)	3.69 (4.5)
				40	2.62 (5.2)	5.48 (6.1)	3.96 (5.4)

Adapted from June Boon, Veterinary Echocardiography, 1998
Rishniw M and Hollis NE, J Vet Intern Med 2000; 14:429-435
Hansson et al, Vet Rad and Ultrasound 2002
Bonagura et al. Echocardiography: principles of interpretation, Vet Clin North Am 15:1177, 1995



PATIENT

	50	2.88 (7.1)	6.07 (8.3)	4.46 (7.4)
--	----	------------	------------	------------

Penny Shogren

SPECIES

Canine

BREED

Basset Hound

SEX

Female Spayed

AGE

~13 years

WEIGHT

33lbs

INTERPRETED BY

Maggie Machen Lamy,
 DVM, DACVIM
 (Cardiology)

IMAGING PERFORMED BY

Loetitia St-Jacques,
 LVT/RVT

HOSPITAL NAME

Mountian View
 Animal Hospital

REFERRING VET

Dr. Kalivoda

INVOICE

21080

DATE

9/16/21

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Overtly normal cardiac structure and function with no obvious cause of a murmur identified. A small tricuspid leak is noted which is unlikely to be heard on exam. No significant valvular insufficiencies were noted, and no structural issues identified. In the absence of significant volume changes (dehydration) or anemia, other possibilities include a physiologic flow murmur only present with elevated heart rates, or a small flow abnormality not seen here. It is reasonable to monitor periodically via recheck echocardiography in the future, particularly should the murmur persist/progress.

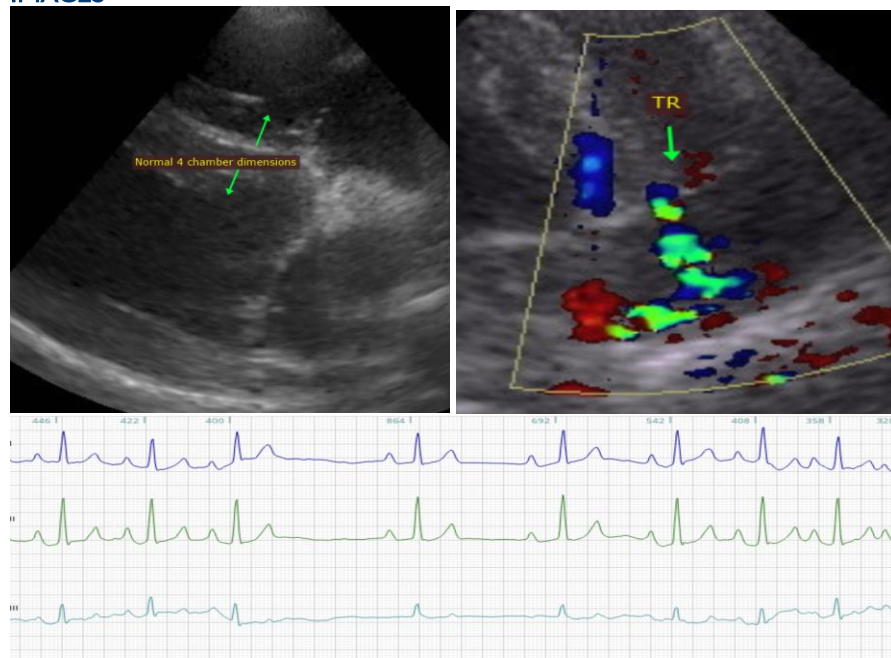
The ECG is largely unremarkable although a highly variable heart rate is identified. Rates jump as high as 188bpm; however, the rhythm appears sinus on the tracing. During the echocardiogram brief periods of tachycardia are again noticed which may warrant further investigation depending on future clinical exam findings. Reassessing the ECG and/or a holter monitor may be warranted if heart rates appear inappropriate.

No cardiac medications are indicated at this time. Monitor for any development of cough, labored breathing or exercise intolerance.

No cardiac contraindication for general anesthesia. If tachycardia is noted on the exam in the future, a holter monitor should be considered.

Recommend recheck echocardiogram in 12 months to screen for progression or development of concurrent cardiac disease that the preexisting murmur may mask.

IMAGES





PATIENT

Penny Shogren

SPECIES

Canine

BREED

Basset Hound

SEX

Female Spayed

AGE

~13 years

WEIGHT

33lbs

INTERPRETED BY

Maggie Machen Lamy,
DVM, DACVIM
(Cardiology)

IMAGING PERFORMED BY

Loetitia St-Jacques,
LVT/RVT

HOSPITAL NAME

Mountian View
Animal Hospital

REFERRING VET

Dr. Kalivoda

INVOICE

21080

DATE

9/16/21

The information and recommendations provided are based on the images presented by the referring veterinarian. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

Thank you for this referral. This report was generated using transcription software, and minor dictation errors may be present. If the clinical or image interpretation does not parallel your findings or if I can be of any further assistance, please contact me.

Maggie Machen Lamy, DVM
Diplomate of the American College of Veterinary Internal Medicine (Cardiology)
info@sonopath.com