



PATIENT

Tessie Nace

SPECIES

Canine

BREED

Terrier Mix

SEX

Female Spyaed

AGE

13 years

WEIGHT

15lbs; 6.8kgs

INTERPRETED BY

Maggie Machen Lamy,
DVM, DACVIM
(Cardiology)

IMAGING PERFORMED BY

Melissa Weisman, DVM

HOSPITAL NAME

Minnesota Veterinary
Ultrasound

REFERRING VET

Dr. Weisman

INVOICE

20454

DATE

8/10/21

PRESENTING CLINICAL SIGNS

History: Presented yesterday for coughing and gagging.

-Current medications: Patient was treated with 25mg Lasix IM followed by 12.5mg/kg PO bid and Convenia 80mg/ml 0.77ml SQ. Owner reports some improvement on Lasix.

RADIOGRAPHIC FINDINGS *NOTE: Images submitted for supplemental cardiac information only.
Borderline cardiomegaly, VHS: 10.5. No obvious CHF.

ECHOCARDIOGRAM FINDINGS *limited image set due to patient instability.

2D, m-mode, color flow and doppler imaging is available. Diffuse thickening of mitral valve leaflets with no prolapse into the left atrial lumen. Trace/mild eccentric mitral regurgitation with no left atrial dilation. Mild LV dilation with adequate myocardial function. The tricuspid valve appears normal with no obvious tricuspid regurgitation. The right heart is prominent. No obvious aortic or pulmonic insufficiency. No pericardial or pleural effusion noted. No obvious cardiac masses. Concern for high grade AV block on m-mode and 2D imaging with a profound bradycardia.

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	NM	NM	NM	1.2	69	95	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	51	NM	NM	6.8	1.7	3.2	1.0
*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)
				50	2.88 (7.1)	6.07 (8.3)	4.46 (7.4)

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Essentially normal cardiac structure and function is identified in this study. Early chronic degenerative valve disease is noted with a small mitral leak; however, the LA is normal in dimension. The LV is mildly dilated and the right heart prominent which should be monitored



PATIENT

Tessie Nace

going forward. Most importantly, the patient is profoundly bradycardic with **concern for high-grade AV block based upon these images**. No additional issues are noted in this study.

SPECIES

Canine

Given these findings, CHF is considered unlikely without significant atrial dilation. Even with a significant bradycardia, it would be unusual for congestion to develop prior to significant chamber dilation. Given this juxtaposition, it is unclear how respiratory distress fits with presumed AV block and **immediate referral for further evaluation/treatment and or consideration of a pacemaker is indicated**. A baseline ECG should be evaluated ideally with a Cardiologist. For now, given the unusual presentation and a positive reported response, it is reasonable to continue Lasix until the patient is further evaluated. Overall, primary respiratory causes are considered more likely and should be addressed as such.

BREED

Terrier Mix

SEX

Female Spyaed

*If referral is declined, treatment options for AV block are limited; however, an in hospital ECG can be submitted for evaluation. Full cardiac and respiratory therapy (Lasix, pimobendan, broad spectrum antibiotic, theophylline) can be instituted in this case; however, a lack of response would confer a poor to grave prognosis.

AGE

13 years

Prognosis depends upon further evaluation.

WEIGHT

15lbs; 6.8kgs

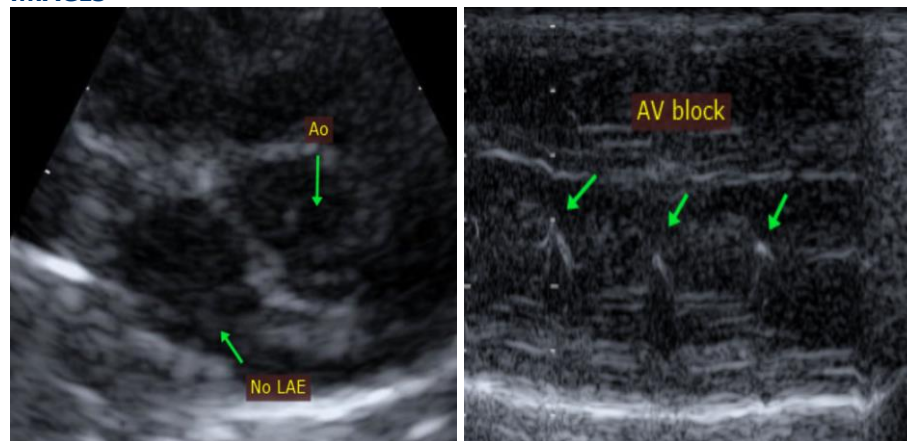
PLAN

Immediate referral for ECG evaluation and further evaluation with a Cardiologist.

INTERPRETED BY

Maggie Machen Lamy,
DVM, DACVIM
(Cardiology)

IMAGES



IMAGING PERFORMED BY

Melissa Weisman, DVM

HOSPITAL NAME

Minnesota Veterinary
Ultrasound

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.

REFERRING VET

Dr. Weisman

INVOICE

20454

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.

DATE

8/10/21



PATIENT

Tessie Nace

Maggie Machen Lamy, DVM

Diplomate of the American College of Veterinary Internal Medicine (Cardiology)

info@sonopath.com

SPECIES

Canine

BREED

Terrier Mix

SEX

Female Spyaed

AGE

13 years

WEIGHT

15lbs; 6.8kgs

INTERPRETED BY

Maggie Machen Lamy,
DVM, DACVIM
(Cardiology)

**IMAGING
PERFORMED BY**

Melissa Weisman, DVM

HOSPITAL NAME

Minnesota Veterinary
Ultrasound

REFERRING VET

Dr. Weisman

INVOICE

20454

DATE

8/10/21