



PATIENT

Duke Hill

SPECIES

Canine

BREED

Minautre Schnauzer

SEX

Male Neutered

AGE

8 years

WEIGHT

22.9lbs

INTERPRETED BY

Maggie Machen Lamy,
DVM DACVIM
(Cardiology)

IMAGING PERFORMED BY

Crystal Hill, RVT

HOSPITAL NAME

Nelson Animal
Hospital

REFERRING VET

Dr. Frederick

INVOICE

24677

DATE

6/8/22

PRESENTING CLINICAL SIGNS

History: Recheck echo – previously diagnosed with moderate CVD in 2020. Doing well. Recent cough which resolved.

-Current medications: Apoquel, Pimobendan 2.5BID and Trazodone as needed.

-Abnormal PE/Chem/CBC/UA Results: M1 increase in BUN, Albumin, ALP, otherwise NSF.

ECHOCARDIOGRAM FINDINGS

2D, m-mode, color flow and doppler imaging is available. Diffuse thickening of mitral valve leaflets (anterior>posterior) with minimal prolapse into the left atrial lumen. Moderate eccentric mitral regurgitation with moderate left atrial dilation. Normal MR velocity. Mildly increased LV diameter with hyperdynamic myocardial function. The tricuspid valve appears subjectively normal, with trace tricuspid regurgitation. Normal velocity. Normal right atrial and ventricular diameter. The pulmonic and aortic valves are normal in morphology and mobility. Normal pulmonic and aortic outflow velocities. No aortic or 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	5.9	2.0	1.63	1.75	44	76	0.7
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	160	1.9	1.4	10.4	2.9	3.9	2.1
*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)
<i>*Note: All measurements based upon multi-modal images and methods. An average value is reported.</i>				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

Chronic degenerative valve disease causing moderate mitral and trace tricuspid regurgitation persists. Moderate left atrial enlargement indicates there is relatively low risk for imminent complication, however risk for progression to spontaneous congestive heart failure in the future is elevated. No additional issues are identified.



PATIENT
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Given these findings, continued Pimobendan is indicated in this patient as below. Continue assessment of progression in the future will help predict long term outcome, however prognosis is guarded at this stage (B2).

SPECIES
Canine
While mainstem bronchi compression may certainly be contributing to a chronic increase in coughing, other primary airway contributions should also be considered (tracheal collapse, COPD/chronic bronchitis, etc.). Consider hydrocodone for any mechanical component due to cardiomegaly. Screening chest radiographs are recommended.

BREED
Minautre Schnauzer
Omega fatty acid supplementation and mild salt restriction may also be of some long-term benefit. Monitor for development of a progressive cough, labored breathing, exercise intolerance or collapse episodes.

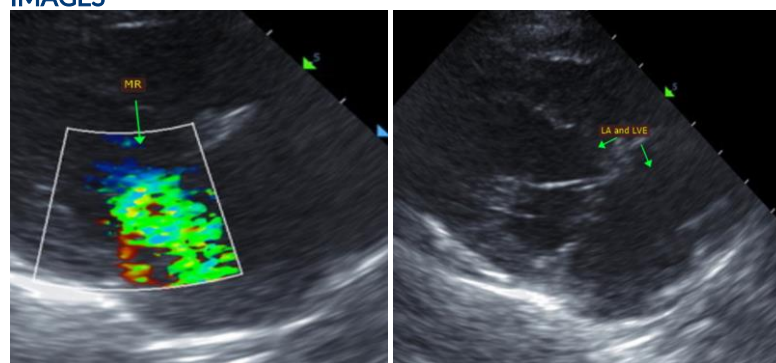
SEX
Male Neutered
Anesthetic risk is considered mildly elevated. Cardiac protective drug choices (opioid/benzodiazepine premedication, Propofol or alfaxalone induction, iso or sevo gas) are recommended. Monitor for arrhythmias, hypotension, and hypoxia both intra and post-operatively and intervene as necessary. Judicious IV fluid rates are recommended to avoid fluid overload. Avoid heart rate stimulating drugs such as atropine unless clinically indicated.

AGE
8 years
Avoid fluid overload. Avoid heart rate stimulating drugs such as atropine unless clinically indicated.

WEIGHT
22.9lbs
PLAN
Baseline BP is recommended. Continue Pimobendan 0.3mg/kg PO q12h. Consider hydrocodone as discussed.

INTERPRETED BY
Maggie Machen Lamy,
DVM DACVIM
(Cardiology)
Recommend monitor for progression with a recheck echocardiogram in 6-12 months, sooner if any development of clinical signs.

IMAGES



IMAGING PERFORMED BY
Crystal Hill, RVT

HOSPITAL NAME
Nelson Animal Hospital

REFERRING VET
Dr. Frederick
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.

INVOICE
24677
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
6/8/22
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