



PATIENT

Cinnamon Nowlan

SPECIES

Canine

BREED

Shih Tzu

SEX

Female Spayed

AGE

13.7 years

WEIGHT

12lbs

INTERPRETED BY

Maggie Machen
Lamy, DVM
DACVIM (Cardiology)

IMAGING PERFORMED BY

Pamela Harrigan,
RDCS

HOSPITAL NAME

Compassion
Veterinary Clinic

REFERRING VET

Dr. Patil

INVOICE

28310

DATE

1/13/23

PRESENTING CLINICAL SIGNS

History: Seen at Urgent Care on 12/8 for wheezing and restlessness at night. Diagnosed with with grade IV/VI murmur. Radiographs: 1) L-Sided Cardiomegaly - consider mitral valve insufficiency. 2) Diffuse aging related pulmonary changes. BP: 175, 178 mmHg. Current medications: 1) Pimobendan - 0.625mg BID (recommended, not started). 2) Enalapril 2.5mg SID (recommended, not started). 3) Gabapentin-50 mg BID PRN for anxiety. Abnormal PE/Chem/CBC/UA Results:Phos-1.1/ALP-383.*Heavy panting throughout study.

ECHOCARDIOGRAM FINDINGS

2D, m-mode, color flow and Doppler imaging is available.
Left ventricle: Mild LV dilation with adequate function. LV wall thicknesses are normal.
Left atrium: The left atrium is moderate to severely dilated.
Mitral valve: The mitral valve is mildly thickened with no prolapse into the left atrial lumen. Moderate to severe eccentric mitral regurgitation with a normal velocity.
Aortic valve/Aorta: The aortic valve is normal in morphology and mobility. Normal aortic outflow velocity; laminar flow. No aortic insufficiency.
Right ventricle: Normal right ventricular diameter and morphology indicating no overt evidence of pulmonary arterial hypertension.
Right atrium: Normal RA dimension.
Tricuspid valve: The tricuspid valve appears mildly thickened with no tricuspid regurgitation.
Pulmonic valve/Pulmonary artery: The pulmonic valve is normal in morphology and mobility. No pulmonic insufficiency. Normal RVOT velocity; laminar flow.
Pericardium/other: No pericardial or pleural effusion noted. No obvious cardiac masses.
Heart rhythm: ECG reveals a sinus rhythm with an average HR of 180bpm.

2-Dimensional Measurements

Ao diam (cm)	1.2
LA diam (cm)	2.1
LA:Ao (Swe)	1.8
IVS thickness (cm)	0.6
LVID diastole (cm)	2.4
PW thickness (cm)	0.6
LVID systole (cm)	0.9
FS (%)	61

Doppler Measurements

PV Vmax (m/s)	0.8
AoV Vmax (m/s)	1.3
MR Vmax (m/s)	5.7
TR Vmax (m/s)	NA
TR PG (mmHg)	NA

INTERPRETATION OF THE FINDINGS

Chronic degenerative valve disease causing moderate to severe mitral regurgitation. Moderate to severe 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.

Given LA dilation, Pimobendan is recommended as below. Additionally the BP is elevated and should be reassessed for persistence. If >160mmHg and appears independent of stress level, concurrent use of an ACEI is also recommended. Assessment of progression in the future will help predict long term outcome, however prognosis is guarded at this stage (B2).



PATIENT
 Cinnamon Nowlan

No cardiac contribution to wheezing/restlessness is suspected based upon these findings. Primary respiratory issues are considered more likely.

SPECIES
 Canine

RECOMMENDATIONS

- Institute heart muscle support Pimobendan 0.3mg/kg PO q12h.
- Reassess BP; if persistently elevated institute ACEI 0.5mg/kg PO q12h.
- Omega fatty acid supplementation and mild salt restriction may be of some long-term benefit.
- Once on Pimobendan for 3-5 days, anesthetic risk is considered moderate if needed. Cardiac protective drug choices (opioid/benzodiazepine premedication, propofol or alfaxalone induction, isoflurane gas) are recommended. Pre-oxygenate for 5-10 minutes prior to induction. Monitor for arrhythmias, hypotension, and hypoxia both intra and post-operatively and intervene as necessary. Mild IV fluid restriction is recommended to avoid fluid overload. Avoid heart rate stimulating drugs such as atropine unless clinically indicated.
- Monitor for development of a cough, labored breathing, exercise intolerance or collapse episodes.

BREED
 Shih Tzu

SEX
 Female Spayed

AGE
 13.7 years

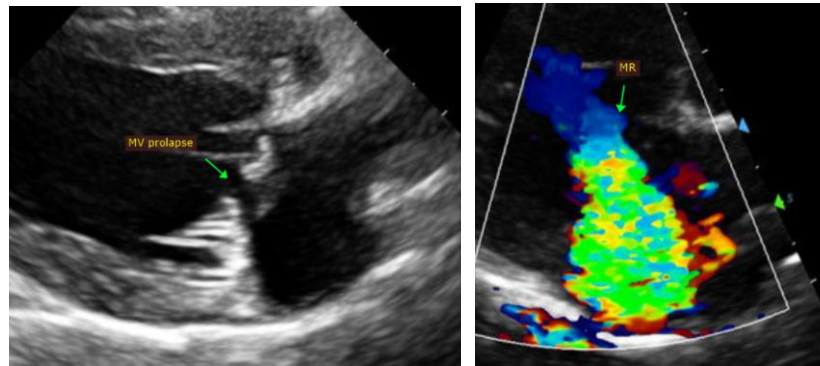
WEIGHT
 12lbs

PLAN

- Recommend conservative monitoring with a recheck echocardiogram in 6 months, sooner if any development of clinical signs.

INTERPRETED BY

Maggie Machen
 Lamy, DVM
 DACVIM (Cardiology)



IMAGING PERFORMED BY

Pamela Harrigan,
 RDCS

HOSPITAL NAME

Compassion
 Veterinary Clinic

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. Patil

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.

INVOICE

28310

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

DATE

1/13/23

Echocardiogram performed by: Pamela Harrigan, RDCS
 Pet Animal Ultrasound Service (4paus.com)