

## PATIENT

Saffie Wunderink

## SPECIES

Canine

## BREED

Shih Tzu

## SEX

Female Spayed

## AGE

11 years

## WEIGHT

11lbs

## INTERPRETED BY

Maggie Machen Lamy,  
DVM, DACVIM  
(Cardiology)

## IMAGING PERFORMED BY

Judy McFarlen, DVM

## HOSPITAL NAME

Westview Veterinary  
Hospital

## REFERRING VET

Dr. Field

## INVOICE

46335

## DATE

1/7/26

## PRESENTING CLINICAL SIGNS

History: Historical grade 3/6 heart murmur no with history of clinical signs. Acute onset of breathing issues, now not able to stand, obvious dyspnea, b lines, patchy edema (atypical for dog). Very pronounced cardiomegaly did appear to be predominantly right sided on the radiograph. No CHF. Given Lasix and started on Pimobendan. Pericardial effusion was ruled out at emergency presentation. Owner administering 2.5mg Pimobendan (0.50mg per kg BID) as of yesterday. Furosemide dosage was 10mg TID (2 mg /pkg) started yesterday. Sedated with Torb and Acepromazine.

## ECHOCARDIOGRAM FINDINGS

2D, m-mode, color flow and doppler imaging is available. Diffuse thickening of mitral valve leaflets with prolapse into the left atrial lumen. Moderate eccentric mitral regurgitation with moderate left atrial dilation. Normal MR velocity. Mild LV dilation with hyperdynamic myocardial function. The tricuspid valve appears mildly thickened with moderate tricuspid regurgitation. Moderate right heart enlargement. TR velocity indicative of severe pulmonary arterial hypertension. Mild MPA dilation. The pulmonic and aortic valves are normal in morphology and mobility. Normal pulmonic and aortic outflow velocities with laminar flow. No aortic or pulmonic insufficiency. No pericardial or pleural effusion noted. No obvious cardiac masses. A relatively low resting heart rate is noted throughout the study.

## 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	6.0	4.5	NM	1.9	44	80	NM
CANINE CARDIAC PARAMETERS	HR (BPM)	AV VMAX (m/s)	PV MAX (m/s)	BODY WEIGHT	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	1.5	0.9	5.0	2.5	3.4	1.9
*Normal chamber parameters expressed as a mean value (SD)				3	1.27 (5.3)	2.46 (2.46)	1.36 (5.5)
<b>BODY WEIGHT DEPENDENT PARAMETERS</b>				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

Chronic degenerative valve disease causing moderate mitral and tricuspid regurgitation is identified. Moderate LA dilation is noted, suggesting relatively low risk for imminent left-sided CHF. The right heart is also affected with moderate RA dilation and moderate TR consistent with severe pulmonary hypertension. No additional issues are identified.



## PATIENT

Saffie Wunderink

## SPECIES

Canine

## BREED

Shih Tzu

## SEX

Female Spayed

## AGE

11 years

## WEIGHT

11lbs

## INTERPRETED BY

Maggie Machen Lamy,  
DVM, DACVIM  
(Cardiology)

## IMAGING PERFORMED BY

Judy McFarlen, DVM

## HOSPITAL NAME

Westview Veterinary  
Hospital

## REFERRING VET

Dr. Field

## INVOICE

46335

## DATE

1/7/26

Given these findings, the risk for pulmonary/respiratory disease is significantly greater than the risk for left-sided CHF in this case. This is supported by the described CXR results and relatively low resting heart rate due to presumably high vagal tone. A Radiologist review of the films is strongly recommended if not already obtained for further evaluation. A PTE would be a consideration in this case based upon these findings. If the patient responded to Lasix, it may be reasonable to continue diuretic therapy going forward. Otherwise, this is likely unnecessary prior to left-sided CHF. Pimobendan should be continued as well, in addition to Sildenafil therapy. Plavix can also be considered if concern for a PTE is elevated.

Prognosis is guarded to poor, given the chronicity and severity of the findings. Omega fatty acid supplementation and mild salt restriction may be of some long-term benefit. Monitor for development of a cough, labored breathing, exercise intolerance or collapse episodes.

Elective anesthesia is not advised.

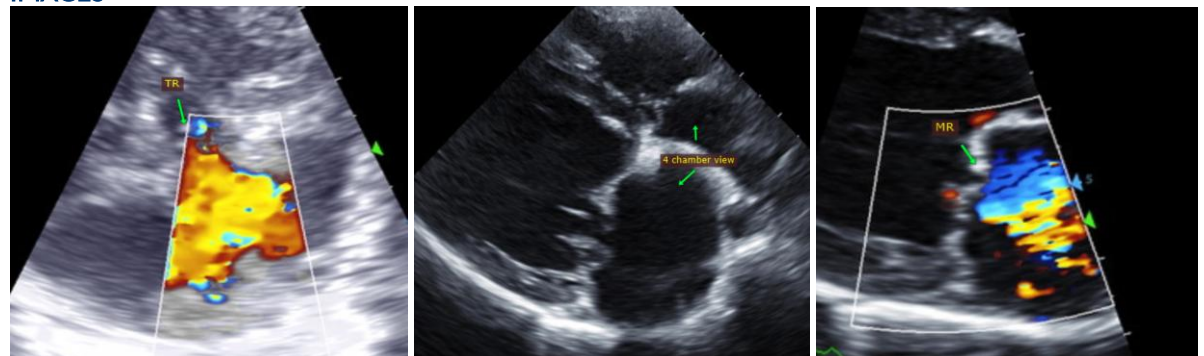
## PLAN

Consider a Radiologist review as discussed. If the patient responded favorably to Lasix; continue 1-2mg/kg PO q12h. Otherwise discontinue. Regardless, continue Pimobendan 0.3mg/kg PO q12h. Institute Sildenafil 1-2mg/kg PO q8h. Consider Plavix if concern for a PTE is high; 1mg/kg PO q24h.

Monitor renal values, BP and clinical status in 1-2 weeks, than every 3-4 months lifelong. If doing well and BP >130mmHg, institute ACE-I 0.5mg/kg PO q12h. If respiratory issues persist, repeat CXR are strongly recommended.

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

## IMAGES



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