
PATIENT PRESENTING CLINICAL SIGNS

Captian Nash BAR. MM were pink, moist, and CRT <2 Grade V/VI left systolic heart murmur with no arrythmia. soft crackles on right. BCS 2/9

SPECIES

Canine

Abnormal PE/Chem/CBC/UA Results: WBC 29.49 (H), Neut 26.76 (H), hct 53% renal values and lytes wnl Heart Rate and Respiratory Rates HR 120, RR 66 Blood Pressure Measurements 150/115 (MAP123)

BREED

Chihuahua Mix

Current Medications Furosemide, cerenia, butorphanol, pimobendan, gabapentin

Radiographic Findings cardiomegaly, distended pulm vessels , perihilar alveolar pattern

SEX
ULTRASONOGRAPHIC EXAMINATION OF THE HEART

MN

AGE

12 yr

WEIGHT

3 kg

INTERPRETED BY

R. McKenzie Daniel,
DVM, DABVP
(Canine and Feline)

IMAGING PERFORMED BY

Sara Hansen

HOSPITAL NAME

Wilvet Salem

REFERRING VET

Dr. Wepprich

INVOICE

12287ag

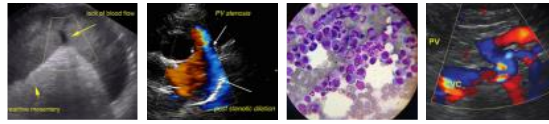
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11/28/2022

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	<1.3	28-40	40-100	<0.6
PATIENT		<2		1.7	52	86	0.2
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				
PATIENT	NM	1.2	0.9		2.7	2.5	

Cardiac Presentation

The echocardiogram for this patient presented excessive left atrial size expressed both in the LA/AO and LA max measurements. The cranial and caudal mitral valve leaflets presented moderate to marked thickening more prominent in the septal leaflet consistent with endocardiosis with mild valvular prolapse. Doppler indicated moderate eccentric insufficiency. The left ventricle presented thicknesses with linear contour and subjective minor increased left ventricle volume. The myocardium presented normal echogenicity without subjective evidence of significant fibrotic or ischemic disease. Contractility of the ventricular walls was adequate and in normal range for this patient evidenced by the fractional shortening measurement and subjective evaluation of the different regions of the myocardium. The left ventricular outflow tract demonstrated normal laminar flow and subjective structural integrity. The right atrium and auricle revealed normal size, structure and content. No evidence of masses was noted or chamber overload. Tricuspid valvular assessment demonstrated adequate linear morphology. The right ventricle was of normal size (1/3 diameter of LV), chordae structure, myocardial echogenicity and thickness. Pulmonic tract assessment revealed normal valve structure, laminar flow, and diameter (approx.1:1 pa/ao ratio). No visible pericardial or free pleura fluid was noted. No echographically detectable evidence of infiltrative disease was visible. The cranial mediastinum and pericardial regions were free of masses in the visible window.



PATIENT **ULTRASONOGRAPHIC FINDINGS**

Captian Nash

- Chronic mitral valve disease (ACVIM B2) with valvular prolapse

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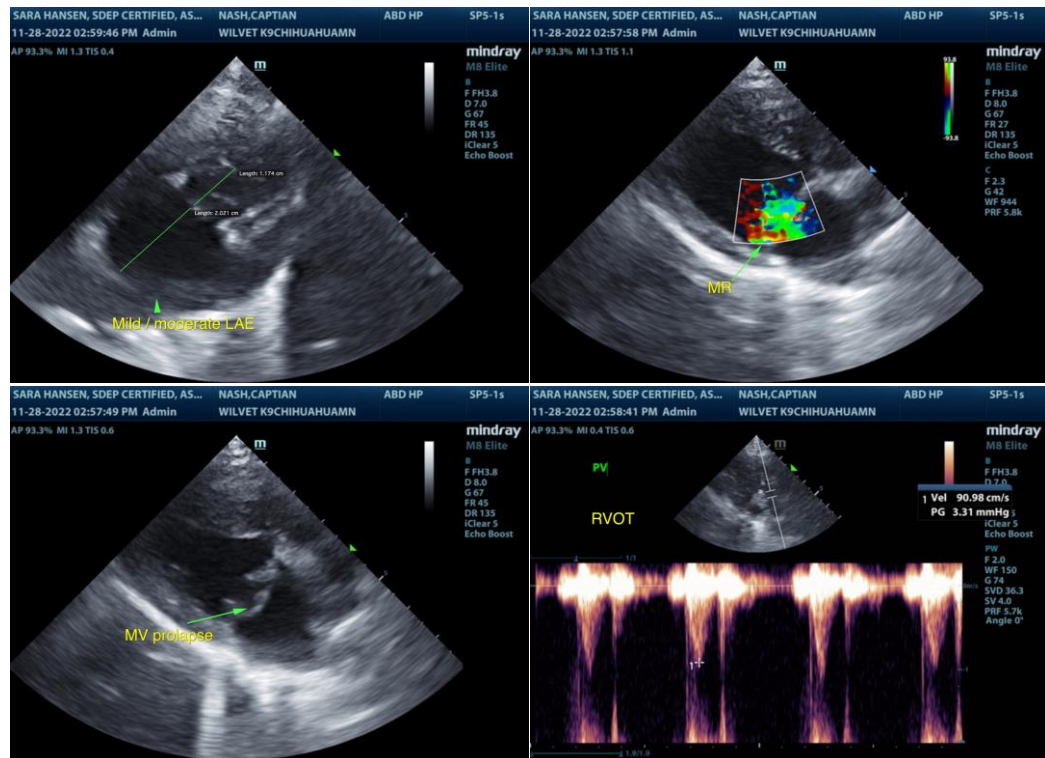
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INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

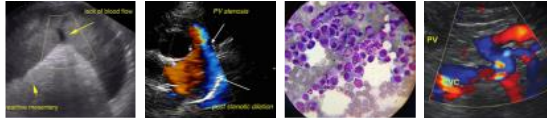
The cause of the murmur is secondary to chronic degenerative valvular changes with concurrent valvular prolapse and secondary eccentric moderate mitral valve insufficiency. The mild to moderate LA enlargement indicates that the risk of complication is mild to moderately elevated. No other clinical issues such as LV systolic dysfunction or evidence of clinical pulmonary hypertension were present. The LA enlargement suggests that a contributing component to the pulmonary radiographic abnormalities may include left heart congestion although the degree of LA/LV enlargement was not overtly consistent with left sided heart failure. This may indicate a possible multicentric component to the radiographic changes. Empirical therapy with Pimobendan 0.3 mg/kg PO BID as well as lowest effective dose of Lasix 1-2 mg/kg PO BID and monitoring of clinical and radiographic response as well as systemic BP and renal parameters is warranted.

Prognosis is highly variable and serial sonographic monitoring is required for further prognosis. Recheck echocardiogram recommended in 4 months, sooner if progressive pulmonary changes or clinical signs suggestive of CHF are noted.



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

Thank you for this referral. If the clinical or image interpretation does not parallel your findings or if I



PATIENT

can be of any further assistance please contact me.

Captian Nash

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