



PATIENT

Bella Howells

SPECIES

Canine

BREED

Chihuahua

SEX

FS

AGE

14yr

WEIGHT

7lb

PRESENTING CLINICAL SIGNS

Patient currently on Sildenafil, presents for worsening cough, hacking and collapsing trachea.

Current med: Sildenafil 10 mgs 1 tab BID.

Abnormal PE/Chem/CBC/UA Results: ALT 199, AP 695, K+ 5.9, PLT count 874, potassium 5.9, Na/K ratio 25, chol. 384, PSL 148, Accuplex (neg.).

ULTRASONOGRAPHIC EXAMINATION OF THE HEART

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	5.6	<2.0		1.37	45	78	0.1
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	95	1.1	1.1		2.8	2.25	

INTERPRETED BY

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

IMAGING PERFORMED BY

Kelly Vazquez

HOSPITAL NAME

Summit Dog and Cat Hospital

REFERRING VET

Dr. Lepowski

INVOICE

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DATE

03/28/2023

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 thickening (anterior greater than posterior) consistent with endocardiosis. Mild prolapse of the anterior leaflet was present. Doppler indicated measurable eccentric insufficiency. The left ventricle presented thicknesses with mild alinear contour and was not dilated nor restricted. The myocardium presented normal echogenicity with minor myocardial remodeling and no 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 mild thickening with mild prolapse of the septal leaflet. Mild TR present on Doppler. 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). Normal measured RVOT velocity. 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. Brief sonographic assessment of the liver revealed no evidence of congestive criteria.

ULTRASONOGRAPHIC FINDINGS

- Chronic mitral valve disease with anterior leaflet prolapse (ACVIM B1-early B2)



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- Tricuspid valve prolapse with mild TR-estimated pulmonary pressure gradient <20 mmHg, not consistent with overt clinical pulmonary hypertension.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

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The cause of the murmur is secondary to chronic degenerative valvular changes with secondary MR and TR. The lack of significant LA enlargement indicates that the current risk of complication secondary to MR is relatively low. No overt evidence of clinical pulmonary hypertension based on measured TR velocity. No other clinical issues such as LV systolic dysfunction. The overall cardiac presentation was not consistent with cardiogenic progressive cough or respiratory abnormalities. This likely suggests that chronic lower airway disease with some contributing owing to body condition/Pickwickian syndrome if clinically applicable is likely. No overt indication for cardiac medications including medical therapy for pulmonary hypertension.

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Primary respiratory therapy with weaning of current sildenafil and clinical monitoring is suggested. Prognosis is highly variable and serial sonographic monitoring is required for further prognosis. Recheck echocardiogram recommended in 6 months, sooner if clinically indicated.

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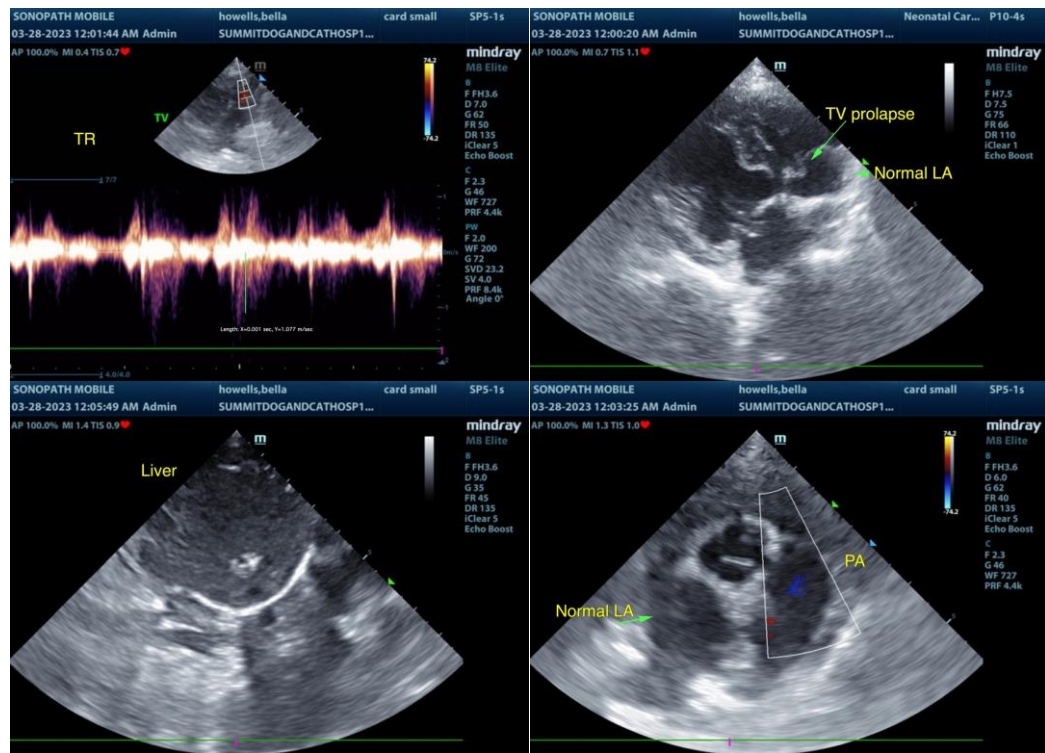
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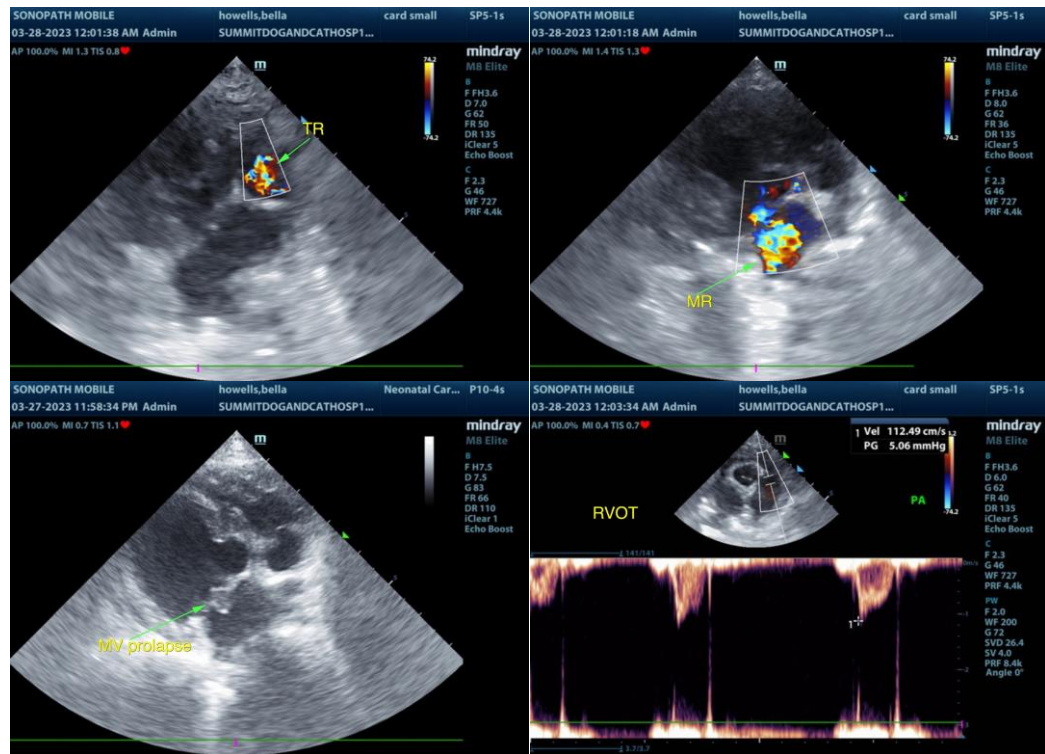
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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

Thank you for this referral. If the clinical or image interpretation does not parallel your findings or if I can be of any further assistance, please contact me.

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