
PATIENT PRESENTING CLINICAL SIGNS

Bruno Bill History: Hacking cough, increased resting respiratory rate, heart murmur 3/5

SPECIES ULTRASONOGRAPHIC EXAMINATION OF THE HEART

Canine	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
BREED								
Schnauzer								
SEX	PATIENT		<2.0		3.2	54.3	89.1	0.25
MN	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)
AGE								
8yr								
WEIGHT	NORMAL PARAMETER	50-100	0.7-1.7	0.7-1.6				
13.2lb	PATIENT	NM	1.5	1.0		4.2	4.5	

INTERPRETED BY

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

IMAGING PERFORMED BY

Sara Hansen

HOSPITAL NAME

Countryside Animal Clinic

REFERRING VET

Dr. Cox

INVOICE

11433ag

DATE

08/19/2022

Cardiac Presentation

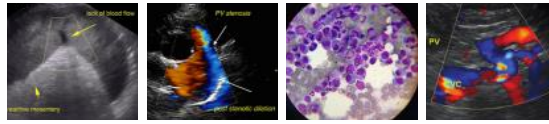
The echocardiogram for this patient presented excessive left atrial size expressed both in the LA/AO and LA max measurements. Deviation of the interatrial septum towards the right atrium consistent with LA pressure was present. The cranial and caudal mitral valve leaflets presented vegetative thickening consistent with endocardiosis. Doppler indicated moderate eccentric insufficiency. The left ventricle presented thicknesses with linear contour with increased LV 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 mild thickening with mild TR 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). 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.

ULTRASONOGRAPHIC FINDINGS

- Chronic mitral valve disease (ACVIM stage C)
- Mild TR-est pulmonary gradient <20 mmHg

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

The cause of the murmur is secondary to chronic degenerative valvular changes with secondary eccentric insufficiency. The severe LA enlargement indicates that the current risk of complication is



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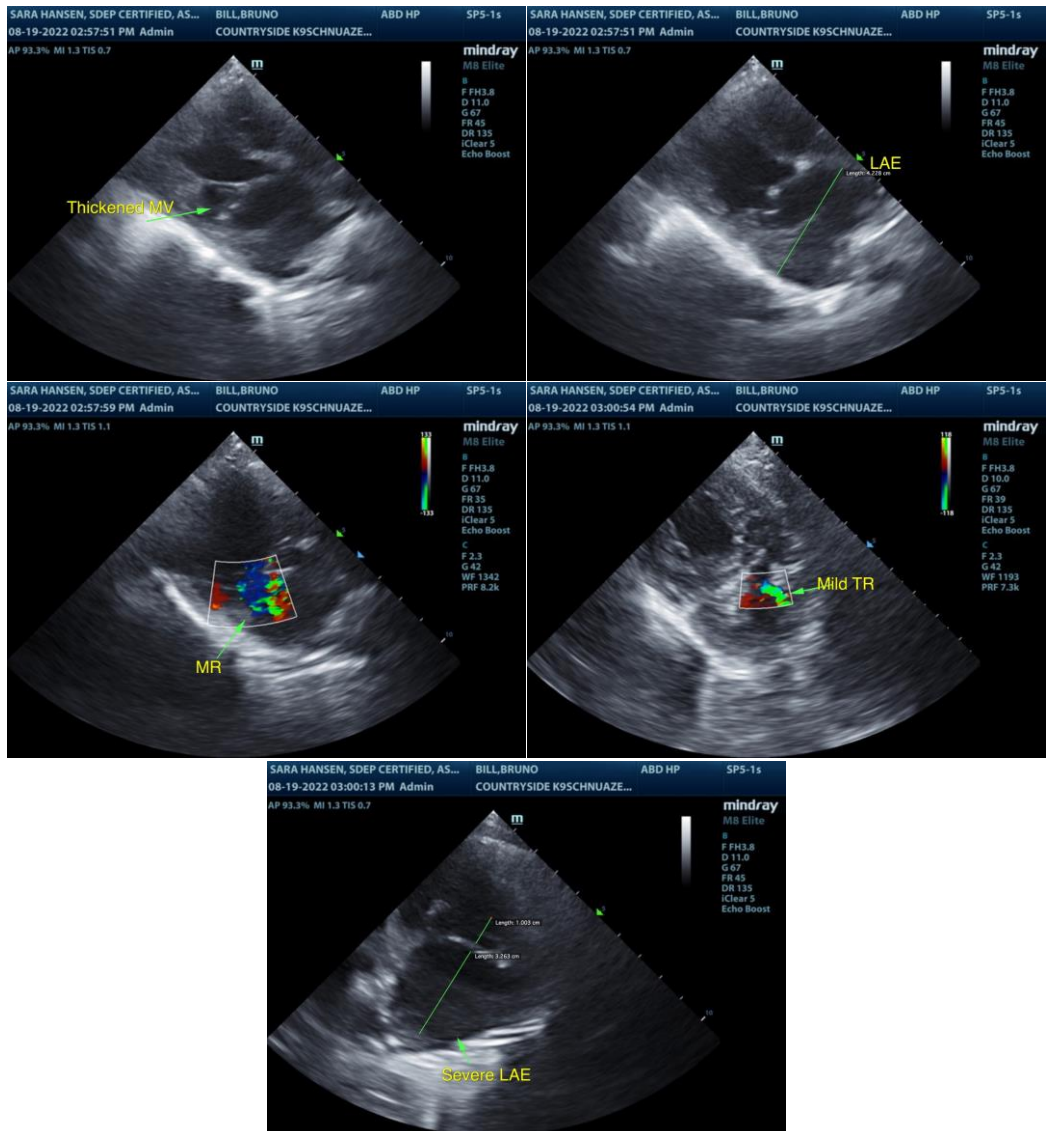
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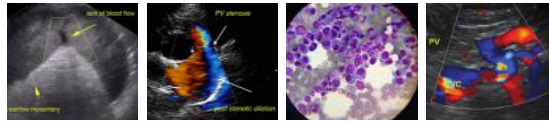
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severely elevated with likely decompensation. The coughing in this patient may be secondary to pulmonary edema and/or concurrent lower airway disease is possible. Pimobendan 0.3 mg/kg PO BID, Lasix Spironolactone combination PO BID and monitoring of resting respiration rate is warranted. This patient may be at lifelong risk for continued potential CHF episodes or malignant arrhythmias. A guarded long-term prognosis is indicated. A recheck echocardiogram recommended in 4-6 months, sooner if clinical signs continue.



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.



PATIENT R. McKenzie Daniel, DVM, DABVP (Canine / Feline Practice)

Bruno Bill info@SonoPath.com

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