



PATIENT PRESENTING CLINICAL SIGNS

Mushroom Bruder

History: 5/6 murmur PMI left side, MVD, cough is getting progressively worse. on furosemide 12.5mg x 1/2 bid, enalapril 1.25 mg x 1/2 bid, pimobendan 1 mg x 1 bid

SPECIES

Canine

ULTRASONOGRAPHIC EXAMINATION OF THE HEART

BREED

Chihuahua

The echocardiogram in this patient demonstrated residual enlarged **left atrial** size based on 3 different LA measurement methods. Chamber volumes and echogenicity were normal. The cranial and caudal **mitral** valve leaflets presented vegetative thickening consistent with endocardiosis. Prolapse of the anterior mitral valve leaflet was noted. Doppler indicated measurable insufficiency. The **left ventricle** presented normal thicknesses with linear contour and was not dilated nor restricted. 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.

SEX

Neutered male

AGE

7 years

WEIGHT

7.5 lbs

INTERPRETED BY

Eric Lindquist, DMV
DABVP, Cert. IVUSS

IMAGING PERFORMED BY

Diane McFadden, RVT

HOSPITAL NAME

Newton VH

REFERRING VET

Dr. Verhalen

INVOICE

42821

DATE

2/15/23

CANINE	MR	TR	LA/AO	LA/AO	FS	EF	EPSS
CARDIAC PARAMETERS	VMAX (m/s)	VMAX (m/s)	(Boon method)	(Heart Base;)	(%)	(%)	(cm)
NORMAL PARAMETER	4.5-5.5	<2.7	1.3	<1.6	28-40	40-100	<0.6
PATIENT	6.12		1.58	1.9	57	88	0.19
CANINE	HR	AV	PV	BODY WEIGHT	LA	LVIDd	LVIDs
CARDIAC PARAMETERS	(BPM)	VMAX (m/s)	MAX (m/s)		2D short axis Base view (cm)	Avg; 2D and m- mode short axis (cm)	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	174	1.0		7.5 lbs	3.21	2.74	



PATIENT ULTRASONOGRAPHIC FINDINGS

Mushroom Bruder Mitral valve disease with left atrial enlargement.

SPECIES INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Canine
BREED I recommend adding Spironolactone at 1-2 mg/kg b.i.d. However, the cough may also have a bronchial/respiratory component as only mild, residual left atrial enlargement is present. A bronchodilator cough suppressant would be indicated. Continuation with the triple therapy in addition to the Spironolactone would be indicated with recheck blood pressure, BUN and creatinine in 7-10 days. Increasing Lasix can also be considered as long as azotemia is not an issue.
 Chihuahua

SEX

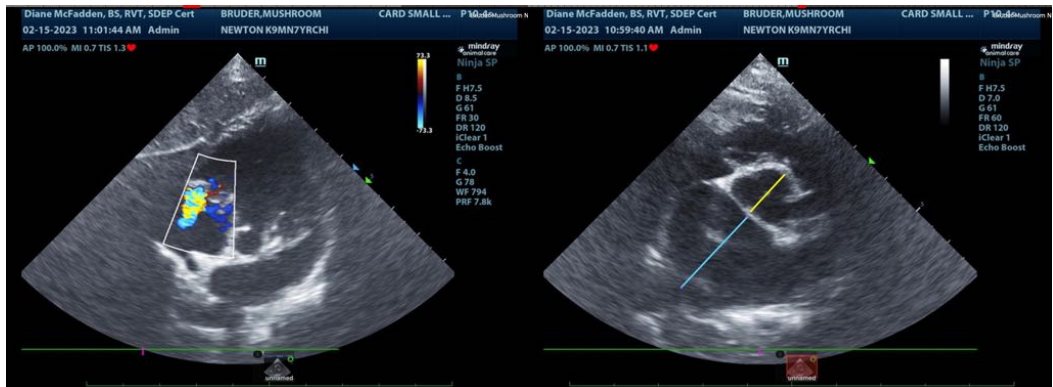
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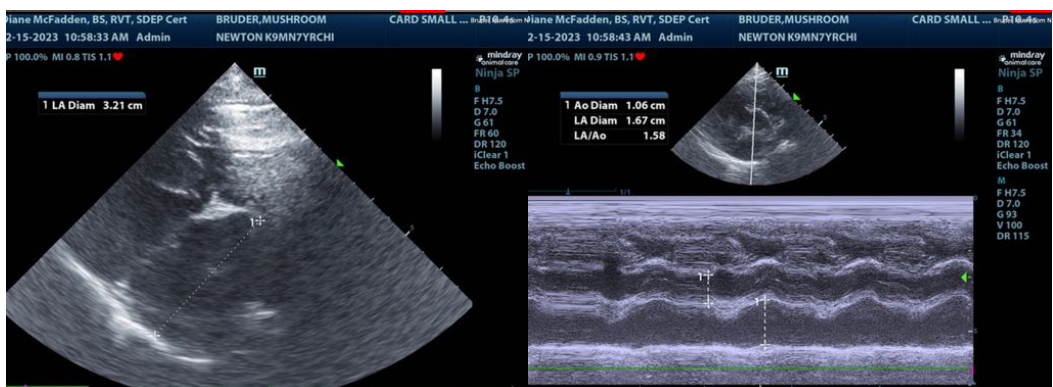
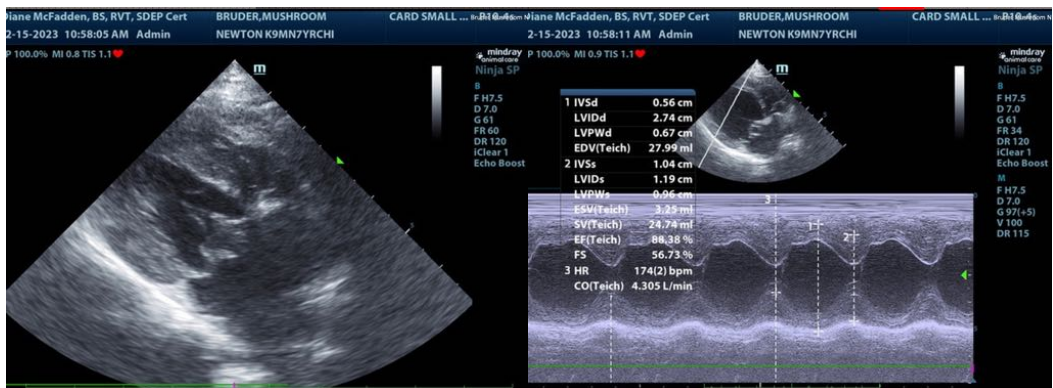
Dr. Verhalen

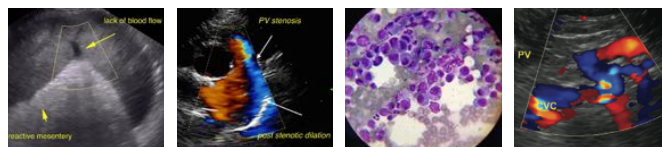
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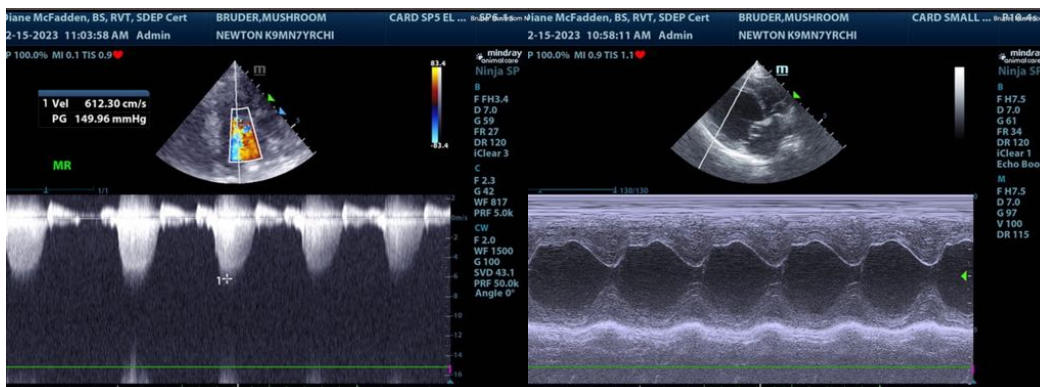
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The information and recommendations provided are based on the images presented by the referring veterinarian/sonographer. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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.

Eric Lindquist, DMV, DABVP, Cert. IVUSS, CEO of SonoPath.com
Info@SonoPath.com