



PATIENT PRESENTING CLINICAL SIGNS

Oscar McDermott

History: coughing, gagging, wet sounding lungs gr 1 murmur currently on furosemide 15mg BID, spironolactone 25mg 1/2 BID improved significantly after increasing dose of furosemide and adding in spironolactone.

SPECIES

Canine

ULTRASONOGRAPHIC EXAMINATION OF THE HEART

BREED

Dachshund X

SEX

Neutered Male

AGE

15 Years

WEIGHT

9 Lbs.

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	--	1.3	NM	1.35	35	67	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	BELOW	BELOW	BELOW	BELOW
PATIENT	NM	1.2	1.0	--	2.5	2.2	--

INTERPRETED BY

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

IMAGING PERFORMED BY

Kelly Reschny

HOSPITAL NAME

The Maples AH

REFERRING VET

Dr. Kazienko

INVOICE

13485

DATE

1/18/22

Cardiac Presentation

The echocardiogram in this patient demonstrated normal **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 without evidence of valvular prolapse or chordae tendineae rupture. The **left ventricle** presented 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 systolic laminar flow and subjective structural integrity. Mild AV insufficiency was present on color doppler assessment. 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.

ULTRASONOGRAPHIC FINDINGS

- Chronic mitral valve disease (ACVIM B-1)
- Mild AV insufficiency

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

The cause of the murmur was most consistent with chronic degenerative valvular changes with



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secondary mitral valve insufficiency. Aortic valve insufficiency was present yet not suspected to be audible. No other clinical issues (such as LV systolic dysfunction, stenotic disease or evidence of clinical pulmonary hypertension) were present. The lack of significant left atrial enlargement given likely mitral valve insufficiency suggests that the current risk for complication is relatively low and was not overtly consistent with the degree of left atrial enlargement that would result in cardiogenic pulmonary edema. Potential for multifactorial component to the respiratory signs in this patient, which may include concurrent lower airway disease, may be possible. However, given the positive response to diuretic protocol, continued diuretic therapy, at the lowest effective dose, to control clinical signs would be appropriate.

Monitoring of three-view chest radiographs, systemic blood pressure (given the presence of aortic valve insufficiency) as well as renal parameters (on diuretic protocol) recommended. Recheck echocardiogram suggested in 6 months or sooner if clinical signs suggestive of progressive heart disease (increased resting respiration rate, exercise intolerance, syncope, etc.) or persistent/progressive respiratory signs.



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. 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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