



PATIENT PRESENTING CLINICAL SIGNS

PATIENT Kaylee Fleming
PRESENTING CLINICAL SIGNS History: Recently diagnosed heart murmur, planning anesthesia for a dental to extract a fractured tooth. No clinical symptoms of heart disease.

SPECIES Canine
RESULTS Abnormal PE/Chem/CBC/UA Results: PE: Grade 4/6 systolic heart murmur

ULTRASONOGRAPHIC EXAMINATION OF THE HEART

BREED

CKCS

SEX

Spayed Female

AGE

8 Years

WEIGHT

10 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	5.7	--	1.73	1.73	48.1	80	0.51
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	139	1.7	1.0	--	3.9	4.0	--

INTERPRETED BY

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

IMAGING PERFORMED BY

Dr. Ebersole

HOSPITAL NAME

Scanvet

REFERRING VET

Dr. Fortin

INVOICE

13392

DATE

1/12/22

Cardiac Presentation

The echocardiogram for this patient presented moderate excessive **left atrial size** expressed both in the LA/AO and LA max measurements. The cranial and caudal **mitral valve** leaflets presented vegetative thickening consistent with endocardiosis. Doppler indicated measurable eccentric insufficiency. No overt evidence of valvular prolapse or chordae tendineae rupture.

The **left ventricle** presented thicknesses with linear contour with mild 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. Mild deviation of the intra-atrial septum towards the right atrium suggestive of increased left atrial pressure was present. **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

- Myxomatous mitral valve disease (ACVIM B-2)

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS



PATIENT

Kaylee Fleming

The cause of the murmur is consistent with chronic degenerative valvular changes and secondary eccentric mitral valve insufficiency. The moderate left atrial enlargement indicates that the risk of future complication is elevated yet prognosis at this stage is highly variable. No other clinical issues such as systolic dysfunction or clinical pulmonary hypertension were noted. Given the moderate left atrium enlargement as well as evidence of mild left ventricle enlargement, Pimobendan at 0.3 mg per kg PO BID warranted at this stage as this medication may help prolong cardiac changes associated with mitral valve insufficiency. Baseline monitoring of resting respiration rate recommended. Anesthetic risk is considered mildly elevated yet not overtly contraindicated. Potentially this patient may be at increased risk for fluid overload under anesthesia. Therefore, judicious IV fluid use advised. Recheck echocardiogram suggested in 6 months or sooner if clinical signs suggestive of left sided heart disease arise.

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Suggested anesthetic protocol may include opioid or Benzodiazepine pre-med, induction with Propofol or Alfaxalone, and appropriate gas anesthesia with avoidance of alpha 2 agonists.

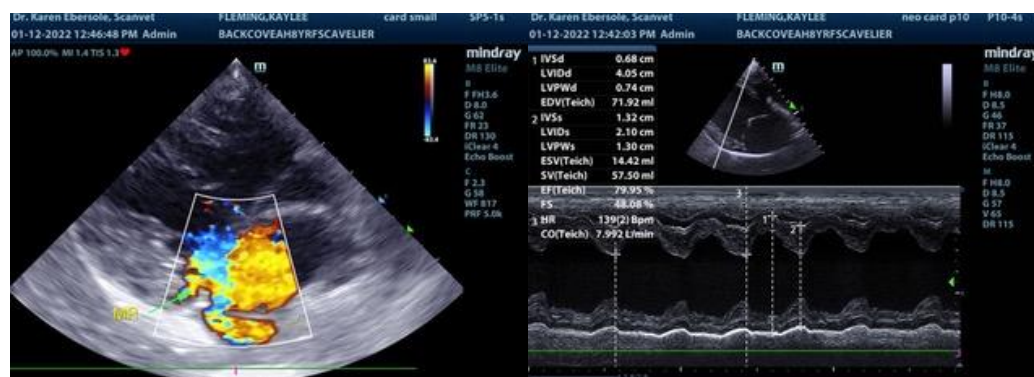
<https://www.antechdiagnostics.com/cadet-braf>

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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.

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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.

DATE

1/12/22

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