



## PATIENT PRESENTING CLINICAL SIGNS

Ralphie Clegg History: 3-4/6 murmur; pre-op scan today to assess for anesthesia for removal of 1-2 cm pigmented gingival mass. not on any meds.

**SPECIES** Abnormal PE/Chem/CBC/UA Results: ALKP 395, rest nsf; USPG 1.006 otherwise nsf.

Canine **ULTRASONOGRAPHIC EXAMINATION OF THE HEART**

**BREED**

Mixed

**SEX**

Neutered Male

**AGE**

12 Years

**WEIGHT**

37 Pounds

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	5.83	--	1.3	1.6	57	87	NM
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	202	1.60	--	--	4.72	3.75	--

**INTERPRETED BY**

Eric Lindquist, DMV  
DABVP, Cert. IVUSS

**IMAGING PERFORMED BY**

Diane McFadden

**HOSPITAL NAME**

Sova Animal Hospital

**REFERRING VET**

Dr. Ammeraal

**INVOICE**

14266

**DATE**

3/11/22

**Cardiac Presentation**

Mild left atrial enlargement noted. LA max was mildly excessive in this patient. The cranial and caudal **mitral** valve leaflets presented vegetative thickening consistent with endocardiosis. Doppler indicated measurable insufficiency. 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. Aortic insufficiency noted at 4.2 m/s. 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**

- Mitral insufficiency
- Mild left atrial enlargement

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**



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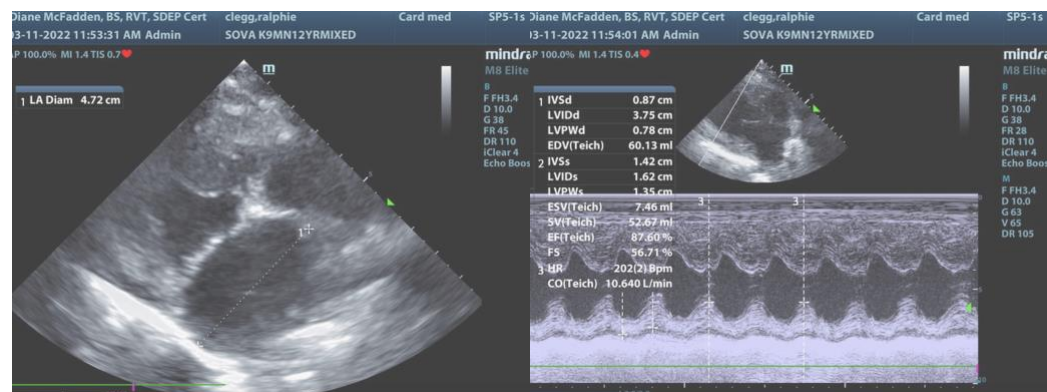
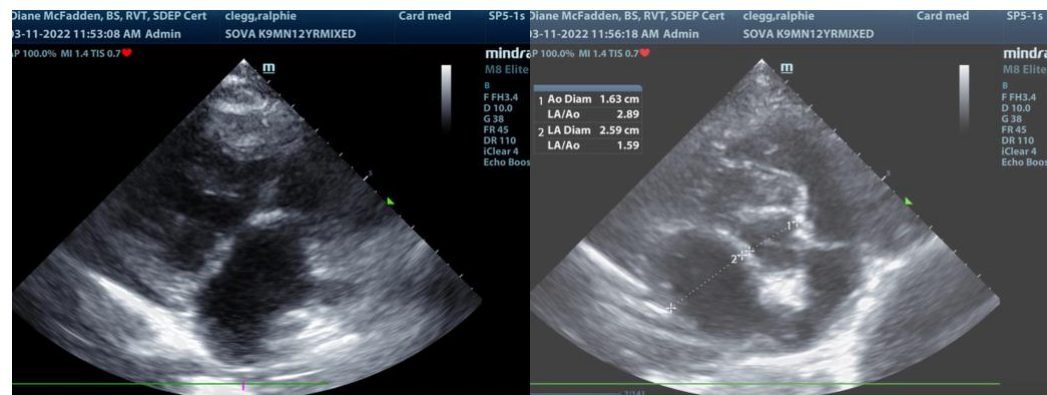
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I recommend initiating Pimobendan at 0.3 mg/kg BID. Assuming vertebral heart score is excessive on radiographs, early-stage B-2 valvular disease with concurrent aortic insufficiency. Blood pressure measurements warranted if not already performed to ensure systemic hypertension is not an issue. Anesthetic risk is minor in this patient, assuming blood pressures are normal. I do recommend Pimobendan for 5-7 days prior to initiating anesthesia. Minimal necessary anesthesia time recommended.

The heart is in a somewhat precarious state with volume overload and a heart that is working to compensate for the valvular insufficiency. Target respiratory rate is < 20 resp/minute after therapy. After initiating therapy, I recommend recheck on the clinical exam, BUN, Creatinine, USG, Chest radiographs & Blood pressure in 5-7 days. Recheck echo in 1 month. Earlier if clinical decompensation is occurring. I do not recommend anesthesia at this time until stabilization has occurred on the recommended medications. Repeat preanesthetic echo is ideal if anesthesia is eventually necessary.

Tobuterol (pre-med), propofol (induction) and isoflurane (maintenance) recommended.





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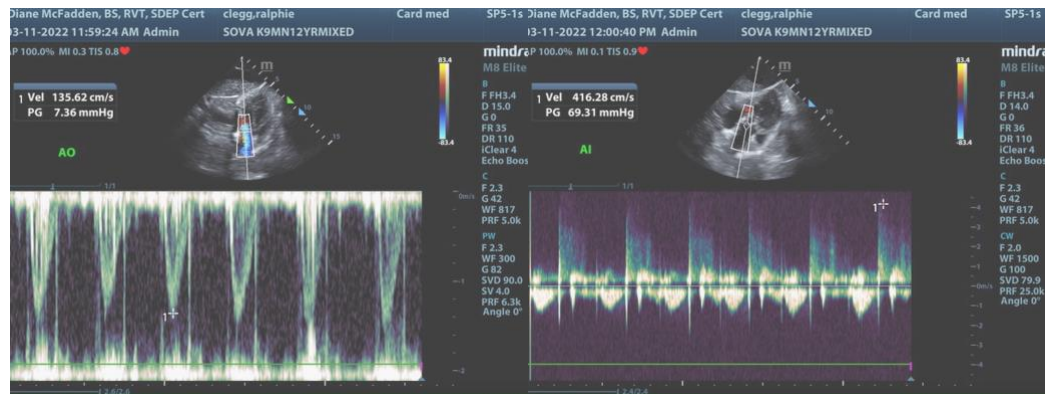
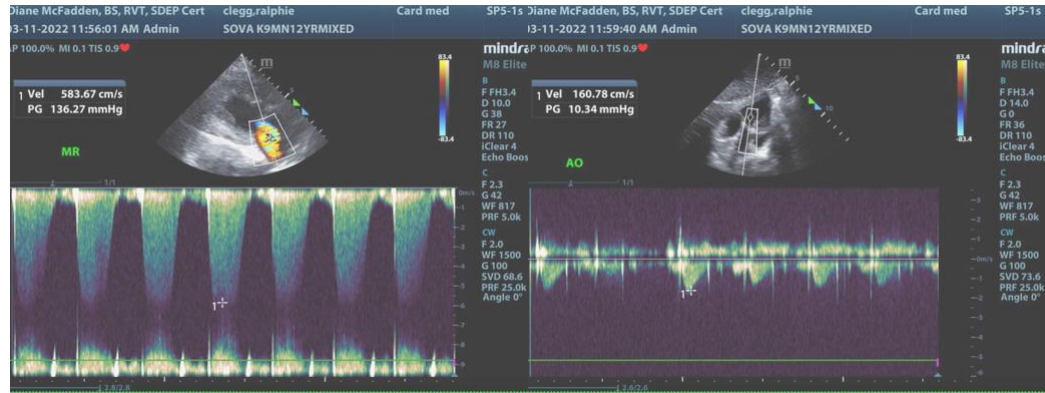
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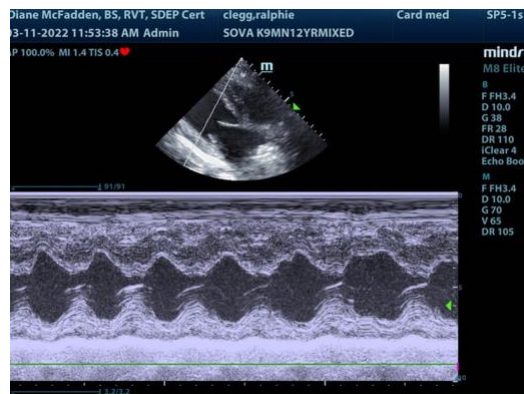
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The information and recommendations provided are based on the images presented by the referring veterinarian. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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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