



**PATIENT PRESENTING CLINICAL SIGNS**

Dino Fugger hacking/gagging, decreased appetite, grade 2/6 systolic murmur. On lasix 12.5mg bid  
 Abnormal PE/Chem/CBC/UA Results: CBC/chem wnl, HNW neg, feca;/giardia both neg.

**SPECIES ULTRASONOGRAPHIC EXAMINATION OF THE HEART**

Canine

**BREED**

Bichon Frise

**SEX**

Neutered Male

**AGE**

14 Years

**WEIGHT**

N/A

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	5.0	4.21	1.78	2.0	49	82	0.1
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	141	1.2	1.07		3.9	3.2	

**Cardiac Presentation**

The echocardiogram for this patient presented excessive **left atrial size** expressed both in the LA/AO and LA max measurements Chamber volumes and echogenicity were normal. The cranial and caudal **mitral** valve leaflets presented vegetative thickening consistent with endocardiosis. Doppler indicated measurable insufficiency. Prolapse of the anterior mitral valve leaflet noted. 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 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** insufficiency noted. 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. Comet tail lung pattern noted in the peripheral lung fields, consistent with pulmonary edema.

**PRIMARY FINDINGS**

- Mitral and tricuspid insufficiency
- Stage C1 valvular disease
- Comet tail lung pattern

**INTERPRETED BY**

Eric Lindquist, DMV

DABVP, Cert. IVUSS

**IMAGING PERFORMED BY**

Diane McFadden

**HOSPITAL NAME**

Byram Animal Hospital

**REFERRING VET**

Dr. Abdul-Chani

**INVOICE**

39471

**DATE**

7/13/22



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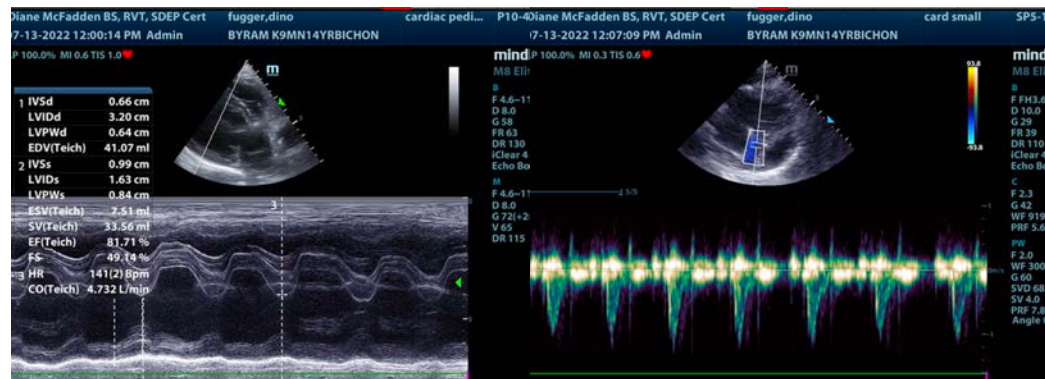
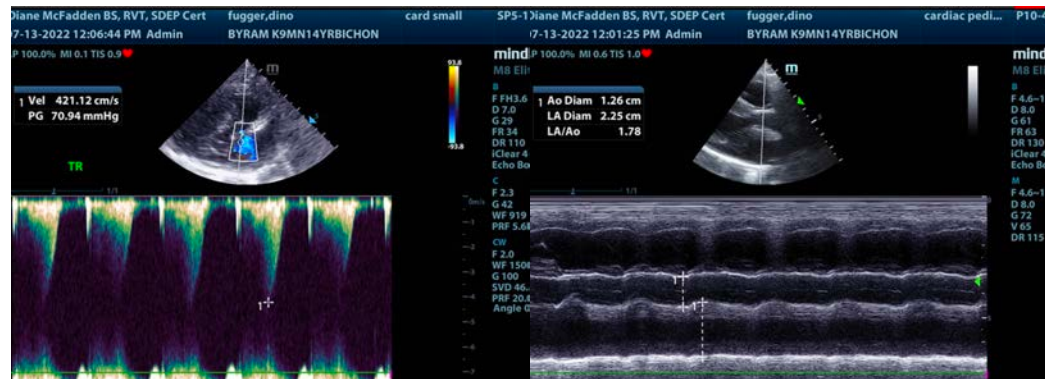
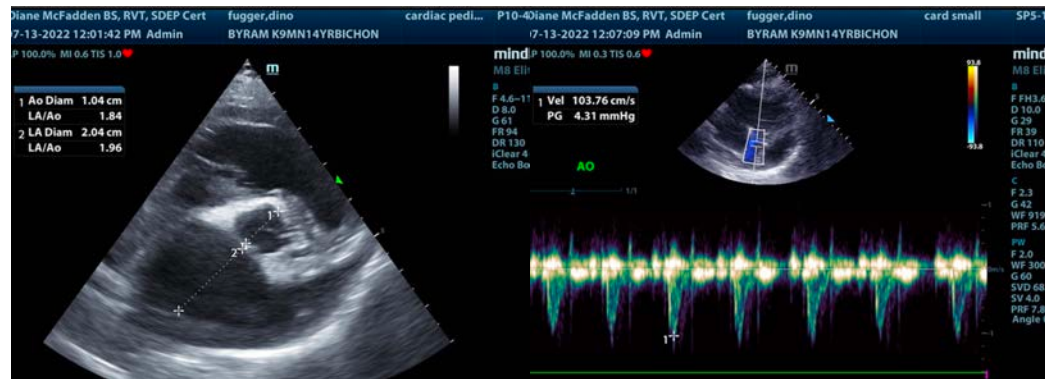
Byram Animal Hospital

**REFERRING VET**

Dr. Abdul-Chani

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

Given that Lasix was already given prior to the echocardiogram in this patient, I believe this presentation is most consistent with C1 valvular disease. Quadrotherapy recommended. Lasix 2-3 mg/kg BID, ACE inhibitor 0.5 mg/kg SID progressing to BID, Pimobendan 0.3 mg/kg BID, and Spironolactone at 1-2 mg/kg BID. Recheck echo in two weeks, monitoring azotemia and hydration status. Sleeping respiratory rate should be <25-30/min.



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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

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