



PATIENT PRESENTING CLINICAL SIGNS

Gizmo Walker increased coughing, grave IV/VI systolic heart murmur, pulses smooth + synchronous. Current meds: pimobendan, lasix, other DVM took him off enalapril beginning of this month

SPECIES ULTRASONOGRAPHIC EXAMINATION OF THE HEART

Canine

BREED

Pekingese

SEX

Neutered Male

AGE

10 Years

WEIGHT

13.3 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	5.1	2.4	1.78	1.8	56	87	0.21
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				
PATIENT	170	1.45	1.3		3.8	3.72	

Cardiac Presentation

INTERPRETED BY

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

IMAGING PERFORMED BY

Jessica Miller

HOSPITAL NAME

Newton Vet Hospital

REFERRING VET

Dr. Wyman-Greenwald

The echocardiogram for this patient presented moderately excessive **left atrial size** expressed both in the LA/AO and LA max measurements. Deviation of the intraatrial septum toward the right atrium noted, indicative of increased left atrial present. The cranial and caudal **mitral** valve leaflets presented vegetative thickening consistent with endocardiosis. Doppler indicated measurable eccentric insufficiency. The **left ventricle** presented increased 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. 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. Doppler assessment revealed minor tricuspid valve insufficiency. 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.

INVOICE

25943

DATE

9/29/21

ULTRASONOGRAPHIC FINDINGS

- Chronic mitral valve disease (ACVIM B2-C)
- Mild tricuspid valve insufficiency – estimated pulmonary pressure gradient (less than 30) not overtly consistent with clinical pulmonary hypertension.



PATIENT

Gizmo Walker

SPECIES

Canine

BREED

Pekingese

SEX

Neutered Male

AGE

10 Years

WEIGHT

13.3 Pounds

INTERPRETED BY

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

IMAGING PERFORMED BY

Jessica Miller

HOSPITAL NAME

Newton Vet Hospital

REFERRING VET

Dr. Wyman-Greenwald

INVOICE

25943

DATE

9/29/21

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

The moderate left atrium enlargement indicates that the current and future risk going forward is elevated with potential for current congestion. The coughing in this patient may potentially be multifactorial in origin with some contribution possibly owing to chronic lower airway disease. Potential mainstem bronchi irritation owing to left atrial enlargement is also possible.

Baseline monitoring of resting respiration rate is suggested. Continued Pimobendan and lowest effective dose of diuretic is warranted. Hydrocodone may prove beneficial given the potential for mainstem bronchi irritation owing to left atrial enlargement. Omega 3 fatty acids and restricted salt diet may be of some benefit. Enalapril may be considered if systemic blood pressure is >130. Recheck echocardiogram suggested in 6 months, sooner if clinical signs consistent with heart disease are noted.



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.

R. McKenzie Daniel, DVM, DABVP (Canine / Feline Practice)
info@SonoPath.com