



PATIENT PRESENTING CLINICAL SIGNS

Biscuit Oguz History: Soft grade 2/6 heart murmur, left PMI, enlarged cardiac silhouette, pulmonary edema. Current treatments: in O2 chamber, had nebulization with albuterol and saline and 1 dose of Lasix IV.

SPECIES Abnormal PE/Chem/CBC/UA Results: Bloods pending.

Canine

ULTRASONOGRAPHIC EXAMINATION OF THE HEART

BREED	CANINE CARDIAC PARAMETERS	MR VMAX (m/s)	TR VMAX (m/s)	LA/AO (Boon method)	LA/AO (Heart Base; Swe)	FS (%)	EF (%)	EPSS (cm)
Pekingese	NORMAL PARAMETER	4.5-5.5	<2.7	1.3	<1.3	28-40	40-100	<0.6
	PATIENT	5.5	1.0	1.25	1.3	44.8	79.6	0.3
SEX	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)
MN	NORMAL PARAMETER							
	PATIENT							
AGE	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)
12 yr	NORMAL PARAMETER							
	PATIENT							
WEIGHT	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)
14.6 lb	NORMAL PARAMETER	50-100	0.7-1.7	0.7-1.6				
	PATIENT	100	1.4	0.75		3.0	2.9	

INTERPRETED BY

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

IMAGING PERFORMED BY

Kelly Vazquez

HOSPITAL NAME

Westwood Regional
Veterinary Hospital

REFERRING VET

Dr. Goldman

INVOICE

10700ag

DATE

06/01/2022

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. No evidence of mitral valve prolapse or chordae tendinea rupture. Doppler indicated measurable eccentric 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. 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 mild thickening with mild TR on Doppler. 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. Regional pericardial pulmonary comet tail lung pattern which is echogenic sound wave interface with microconsolidations in the associated lung field was present. Overall, the lung fields should not be visualized by sonogram unless microconsolidation or other pathology is present.



PATIENT **ULTRASONOGRAPHIC FINDINGS**

Biscuit Oguz

- Chronic mitral valve disease (ACVIM B1)
- Mild TR-estimated pulmonary pressure gradient (less than 20) not consistent with pulmonary hypertension

SPECIES

Canine

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

BREED

Pekingese

The cause of the murmur is most consistent with chronic degenerative valvular changes with secondary mitral and tricuspid valve insufficiency, The lack of LA enlargement indicates that the risk of complication is low at this stage. Without evidence of concurrent clinical pulmonary hypertension, the cardiac presentation was not overtly suggestive of a cardiogenic component to the patient's respiratory abnormalities or pulmonary edema. This is suggestive of noncardiogenic respiratory disease i.e. ARDS, pneumonitis, noncardiogenic pulmonary edema or other primary pulmonary disease. No indication for cardiac medication at this time. Continued low dose diuretic therapy with assessment of clinical response would not be unwarranted. Continued as needed respiratory supportive care and O2 is suggested. Eventual lower airway sampling may be required for definitive diagnosis.

SEX

MN

AGE

12 yr

WEIGHT

14.6 lb

INTERPRETED BY

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

IMAGING PERFORMED BY

Kelly Vazquez

HOSPITAL NAME

Westwood Regional
Veterinary Hospital

REFERRING VET

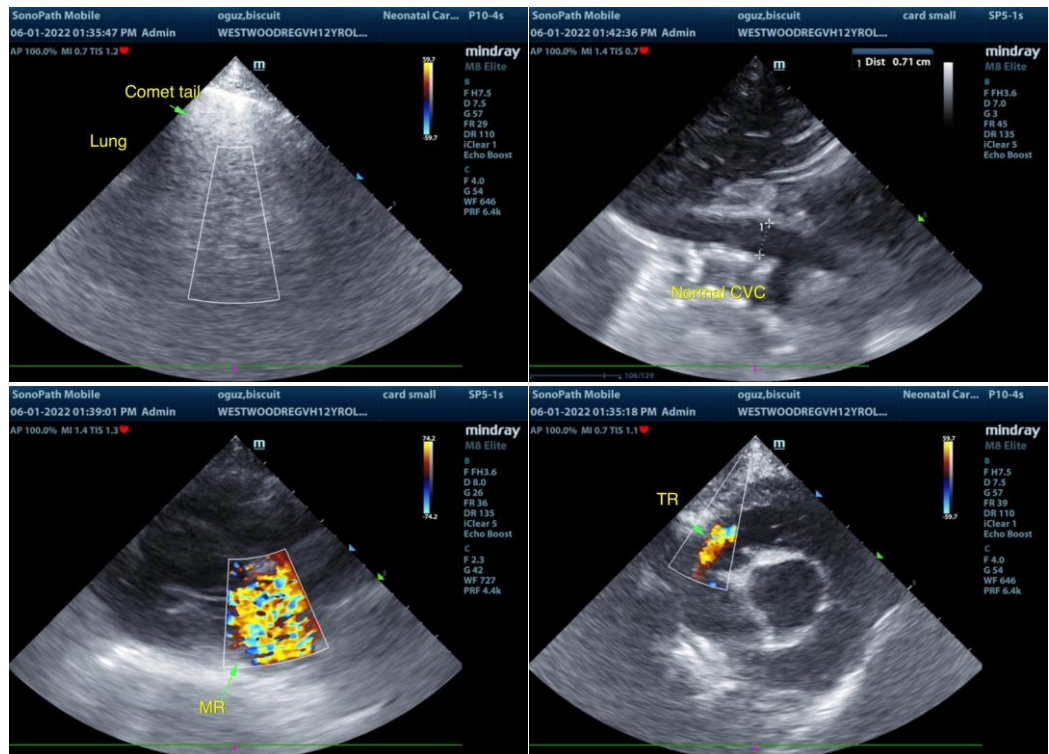
Dr. Goldman

INVOICE

10700ag

DATE

06/01/2022





PATIENT

Biscuit Oguz

SPECIES

Canine

BREED

Pekingese

SEX

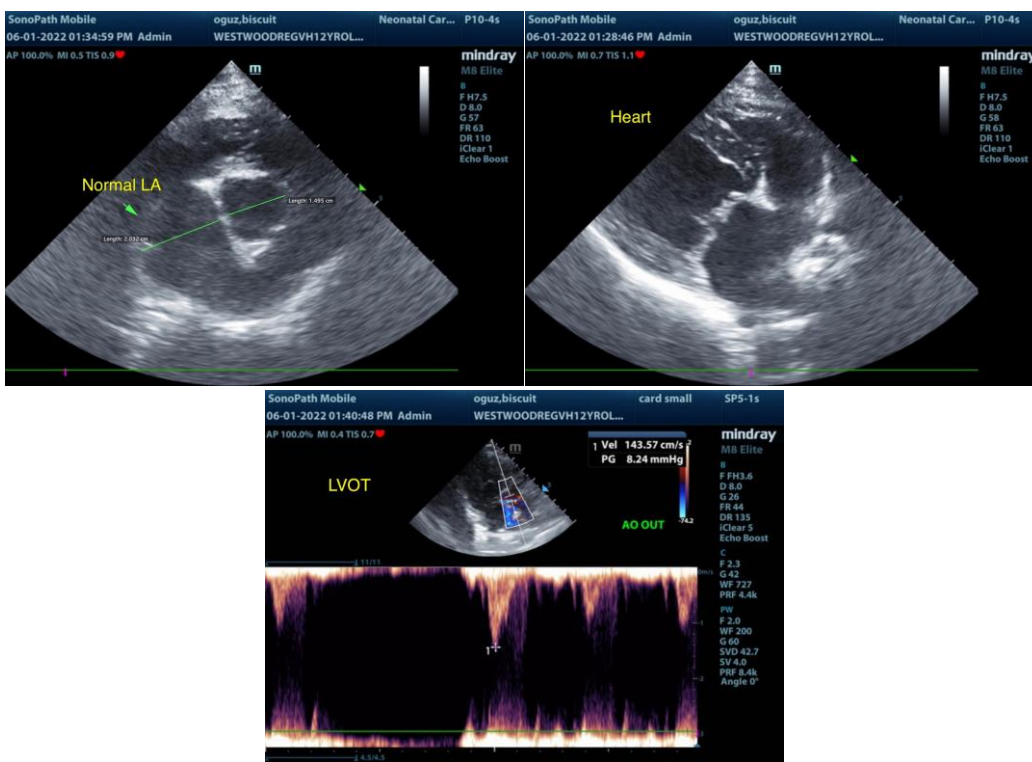
MN

AGE

12 yr

WEIGHT

14.6 lb



INTERPRETED BY

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

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.

IMAGING PERFORMED BY
Kelly Vazquez

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)

HOSPITAL NAME

Westwood Regional
Veterinary Hospital

info@SonoPath.com

REFERRING VET

Dr. Goldman

INVOICE

10700ag

DATE

06/01/2022