



## PATIENT

Gucci Kart

## SPECIES

Canine

## BREED

Chihuahua

## SEX

MN

## AGE

12 years

## WEIGHT

10.1 lbs

## INTERPRETED BY

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

## IMAGING PERFORMED BY

Shari Reffi

## HOSPITAL NAME

Newton Vet

## REFERRING VET

Dr. Chun

## INVOICE

13107

## DATE

1/19/22

## PRESENTING CLINICAL SIGNS

Possible syncope episode, hx of chronic cough and collapsing trachea.

Abnormal PE/Chem/CBC/UA Results: ALT 128(H120); Globulin 4.6(3.6H); TP 7.9 (7.6H)

## ULTRASONOGRAPHIC EXAMINATION OF THE HEART

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	<2.0	1.27	1.29	40.2	74.2	0.24
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	102	1.0	0.9		1.9	1.74	

## 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. 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. 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. 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. No overt evidence of arrhythmogenic disease was evident.

Brief sonographic assessment of the liver revealed no evidence of hepatic congestion or cranial abdominal ascites.



**PATIENT**

**ULTRASONOGRAPHIC FINDINGS**

Gucci Kart

**Primary Findings**

**SPECIES**

- Chronic mitral valve disease (ACVIM B1)

Canine

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

**BREED**

An overall structurally and functionally normal heart without evidence of left or right heart chamber enlargement was noted. Although a murmur was not reported, eccentric mitral valve Insufficiency secondary to mild chronic degenerative valvular changes was present. No other clinical issues such as systolic dysfunction or evidence of clinical pulmonary hypertension were present in this study.

Chihuahua

**SEX**

Given the cardiac presentation, no overt echocardiographic evidence for cardiogenic cough was present. Potential for paroxysmal arrhythmia cannot be definitively excluded. ECG and blood pressure assessments are recommended. No overt Indication for cardiac medications at this time. Conservative monitoring would be recommended with recheck echocardiogram suggested to assess for evidence of progression associated with mitral valve Insufficiency in 6 months. However, a recheck echocardiogram is suggested sooner with potential reassessment of pulmonary pressure if persistent / progressive syncope episodes, given the patient's history of chronic coughing and collapsing trachea.

MN

**AGE**

12 years

**WEIGHT**

10.1 lbs

**INTERPRETED BY**

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



**IMAGING PERFORMED BY**

Shari Reffi

**HOSPITAL NAME**

Newton Vet



**REFERRING VET**

Dr. Chun

**INVOICE**

13107

**DATE**

1/19/22



## PATIENT

Gucci Kart

## SPECIES

Canine

## BREED

Chihuahua

## SEX

MN

## AGE

12 years

## WEIGHT

10.1 lbs

## INTERPRETED BY

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

## IMAGING PERFORMED BY

Shari Reffi

## HOSPITAL NAME

Newton Vet

## REFERRING VET

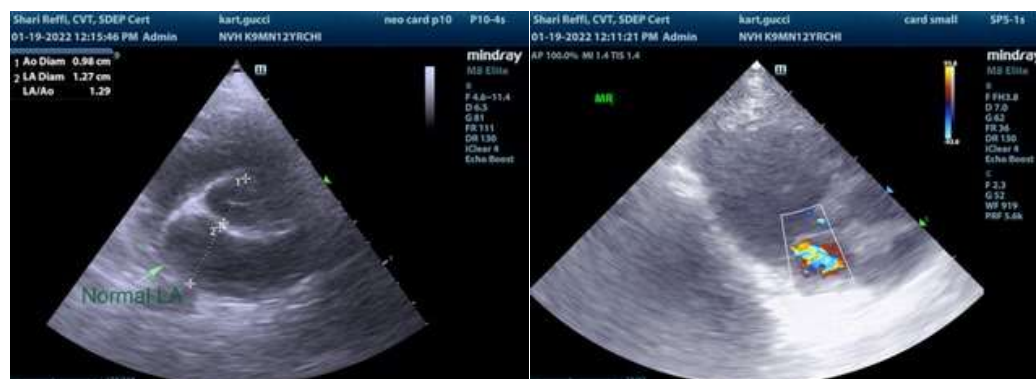
Dr. Chun

## INVOICE

13107

## DATE

1/19/22



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