

## PATIENT

Charlie Young

## SPECIES

Canine

## BREED

Bichon Frise

## SEX

Neutered Male

## AGE

8 Years

## WEIGHT

10 pounds

## INTERPRETED BY

Eric Lindquist, DMV,  
DABVP(CFM), Cert.  
IVUSS

## IMAGING PERFORMED BY

Jill Rumachik

## HOSPITAL NAME

Clarity Imaging LLC

## REFERRING VET

Dr. Tanya Hoffman

## INVOICE

14399

## DATE

03/17/26

## PRESENTING CLINICAL SIGNS

- 5/6 murmur - more coughing noted at home recently

## ULTRASONOGRAPHIC EXAMINATION OF THE HEART

CANINE CARDIAC PARAMETERS	MR VMAX (m/s)	TR VMAX (m/s)	LA/AO (M-Mode)	LA/AO (Heart Base; Swe)	FS (%)	EF (%)	EPSS (cm)
NORMAL PARAMETER	4.5-5.5	<2.7	1.3	Up to 1.6	28-40	40-100	<0.6
PATIENT	<5.0	2.8	2.0	2.0	50	--	NM
CANINE CARDIAC PARAMETERS	HR (BPM)	AV VMAX (m/s)	PV MAX (m/s)	BODY WEIGHT (lbs)	LAD LA MAX 4 Chamber	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	189	--	--	10.0	3.7	2.5	--

## Cardiac Presentation

The echocardiogram in this patient demonstrated enlarged **left atrial** size based on 3 different LA measurement methods. Chamber volumes and echogenicity were normal. Prolapse of the anterior mitral valve leaflets were noted. Doppler indicated measurable insufficiency. The **left ventricle** is moderately dilated with hyper contractility. 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. The patient was tachycardic.

## ULTRASONOGRAPHIC FINDINGS

- Stage B2+ C1 valvular disease.

## INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS



**PATIENT**

Charlie Young

**SPECIES**

Canine

**BREED**

Bichon Frise

**SEX**

Neutered Male

**AGE**

8 Years

**WEIGHT**

10 pounds

**INTERPRETED BY**

Eric Lindquist, DMV,  
DABVP(CFM), Cert.  
IVUS

**IMAGING PERFORMED BY**

Jill Rumachik

**HOSPITAL NAME**

Clarity Imaging LLC

**REFERRING VET**

Dr. Tanya Hoffman

**INVOICE**

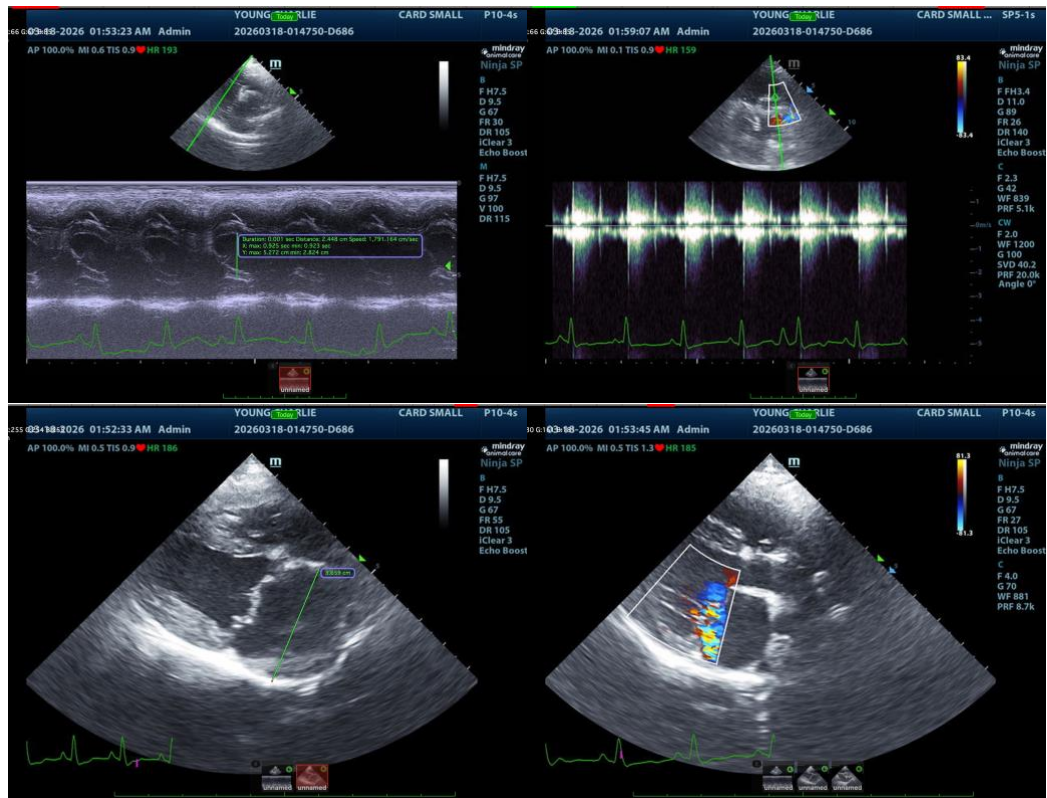
14399

**DATE**

03/17/26

Given the coughing, I'm presuming this patient is in left-sided heart failure. Recommend treating as treating as a C1 valvular disease given the mitral valve prolapse and significant left-sided volume overload. Recommend Pimobendan 0.3 mg/kg BID, ACE inhibitor 0.50 mg/ kg SID, spironolactone at 1.0 to 2.0 mg/kg SID. If any evidence of pulmonary edema is present, then a low-dose LASIX could be considered proactively at 1.0 to 2.0 mg/ kg BID.

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.





## PATIENT

Charlie Young

## SPECIES

Canine

## BREED

Bichon Frise

## SEX

Neutered Male

## AGE

8 Years

## WEIGHT

10 pounds

## INTERPRETED BY

Eric Lindquist, DMV,  
DABVP(CFM), Cert.  
IVUSS

## IMAGING PERFORMED BY

Jill Rumachik

## HOSPITAL NAME

Clarity Imaging LLC

## REFERRING VET

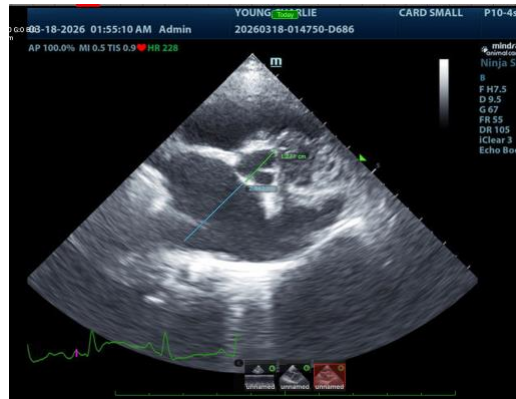
Dr. Tanya Hoffman

## INVOICE

14399

## DATE

03/17/26



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(CFM), Cert. IVUSS,

CEO, Owner, Founder -- SonoPath.com

[info@SonoPath.com](mailto:info@SonoPath.com)