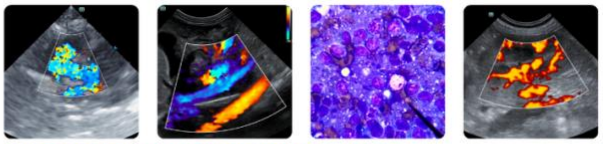


PATIENT

Coco Tenenbaum

SPECIES

Canine

BREED

Chihuahua Mix

SEX

Spayed Female

AGE

7.5 Years

WEIGHT

21 lbs

INTERPRETED BY

R. McKenzie Daniel, DVM, DABVP (Canine / Feline Practice)

IMAGING PERFORMED BY

Dr. Sorbo

HOSPITAL NAME

JM Pet Resort & Veterinary Clinic

REFERRING VET

Dr. Sorbo

INVOICE

16201

DATE

05/14/26

PRESENTING CLINICAL SIGNS

Aclinical grade IV/IV pansystolic murmur PMI bilat. Rescue dog with no other history.

BP 115mmHg. Asymptomatic. Grade 6/6 systolic heart murmur - r/o mitral valve disease, other valvular disease, congenital heart disease.

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	5.1	2.5	NM	1.8	45	77	0.35
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	NM	1.4	0.8	21	4.3	4.1	--

Cardiac Presentation

The echocardiogram in this patient demonstrated moderate increased **left atrial** dimension with associated intra-atrial septal deviation based on 2 different LA measurement methods. The cranial and caudal **mitral** valve leaflets presented thickening consistent with endocardiosis (anterior greater than posterior) with borderline lack of valvular coaptation owing to LA enlargement. Mild valvular prolapse. Doppler revealed significant eccentric MR. The **left ventricle** presented thicknesses with linear contour and moderate increased LV dimension. 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. Normal measured LVOT velocity. The **right atrium** and auricle revealed normal size, structure and content. No evidence of masses was noted or chamber overload. **Tricuspid** valvular assessment demonstrated thickening consistent with degenerative change and 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). Normal measured RVOT velocity. No visible **pericardial** or free pleura fluid was noted. No echographically detectable evidence of cardiac / pericardial tumors was visible. No evidence of arrhythmia or hepatic congestion.

PATIENT

Coco Tenenbaum

SPECIES

Canine

BREED

Chihuahua Mix

SEX

Spayed Female

AGE

7.5 Years

WEIGHT

21 lbs

INTERPRETED BY

R. McKenzie Daniel, DVM, DABVP (Canine / Feline Practice)

IMAGING PERFORMED BY

Dr. Sorbo

HOSPITAL NAME

JM Pet Resort & Veterinary Clinic

REFERRING VET

Dr. Sorbo

INVOICE

16201

DATE

05/14/26

ULTRASONOGRAPHIC FINDINGS

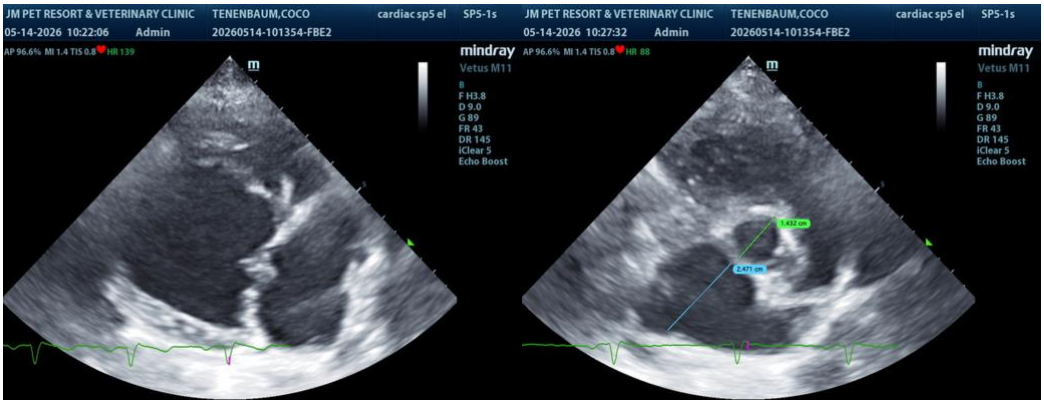
- Chronic mitral valve disease with borderline abnormal mitral valve leaflet coaptation and mild valvular prolapse (ACVIM stage B2).
- Tricuspid insufficiency- no estimated pulmonary pressure gradient suggestive of mild increased pulmonary pressure. No overt clinical pulmonary hypertension.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

The cause of the murmur is chronic degenerative valvular changes with secondary primary significant eccentric mitral valve insufficiency and concurrent tricuspid regurgitation. The left atrial enlargement implies that the current and future risk of complication secondary to mitral valve insufficiency is at least moderately elevated. No other clinical issues such as LV systolic dysfunction or clinical pulmonary hypertension. Pimobendan 0.3 mg/kg BID is recommended. Given the patient is non-clinical, no overt indication for additional medication, however, potential for emerging left heart volume overload is possible with serial monitoring of resting respiration rate going forward is advised. Long-term prognosis is considered highly variable to guarded. Sonographic monitoring is indicated with recheck echo suggested in six months, sooner if clinical signs arise.

If evidence of elevated resting respiration rate, weak diuretic Spironolactone 1-2 mg /kg BID is indicated. Mild salt restriction and omega fatty acids supplementation may prove beneficial.

Anesthetic risk is at least moderate with elective anesthesia not advised unless absolutely necessary. If required, the following protocol is suggested, following 3-5 days of Pimobendan with close clinical monitoring, judicious IV fluid use and limited anesthetic time. Suggested anesthetic protocol may include opioid or Benzodiazepine pre-med, induction with Propofol or Alfaxalone, and appropriate gas anesthesia with avoidance of alpha 2 agonists.



PATIENT

Coco Tenenbaum

SPECIES

Canine

BREED

Chihuahua Mix

SEX

Spayed Female

AGE

7.5 Years

WEIGHT

21 lbs

INTERPRETED BY

R. McKenzie Daniel, DVM, DABVP (Canine / Feline Practice)

IMAGING PERFORMED BY

Dr. Sorbo

HOSPITAL NAME

JM Pet Resort & Veterinary Clinic

REFERRING VET

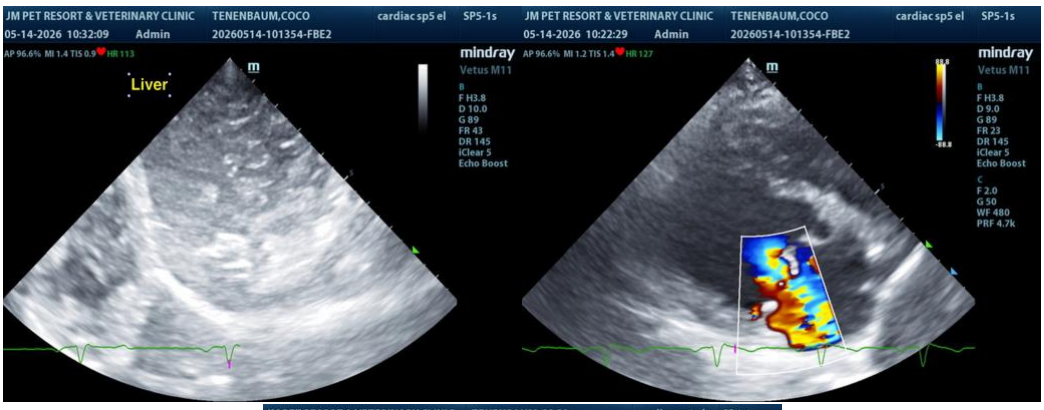
Dr. Sorbo

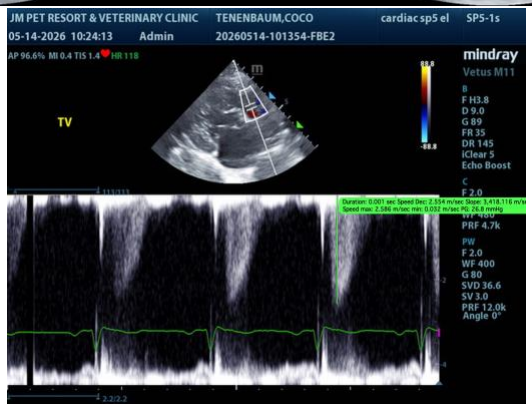
INVOICE

16201

DATE

05/14/26





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.

R. McKenzie Daniel, DVM, DABVP (Canine / Feline Practice)

info@SonoPath.com