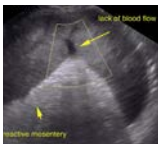
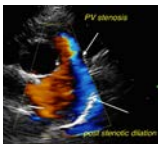
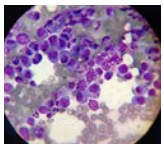
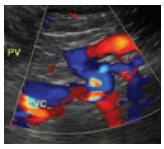
SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™

SonoPath.com
1-800-838-4268 info@sonopath.com

PATIENT
Carson Story

SPECIES
Canine

BREED
Lab

SEX
Neutered Male

AGE
12 Years

WEIGHT
60

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

IMAGING PERFORMED BY
Tasha

HOSPITAL NAME
Dillsburg Vet Clinic

REFERRING VET
Dr. Jacobs

INVOICE
25979

DATE
9/30/21

PRESENTING CLINICAL SIGNS

Heart murmur 4/6 and hyperthyroid

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			NM	1.32	35	67.8	0.32
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	NM	NM	NM		4.2	4.0	

Cardiac Presentation

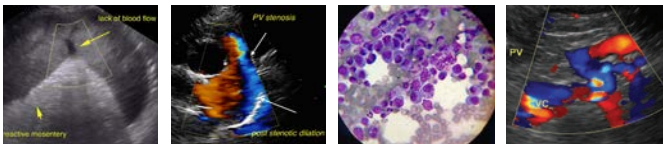
The echocardiogram in this patient demonstrated normal **left atrial** size based on 3 different LA measurement methods. Chamber volumes and echogenicity were normal. The cranial and caudal **mitral** valve leaflets presented subjective vegetative thickening suggestive with endocardiosis. The **left 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 subjective normal laminar flow and 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, subjective 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.

ULTRASONOGRAPHIC FINDINGS

- Overtly normal cardiac structure and function for age
- Thickened mitral valve, suggestive of endocardiosis

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

The cause of the murmur was not definitively evident, yet if the murmur is primarily left-sided, potential for mitral valve insufficiency would be a primary differential diagnosis in this case given the thickened appearance of the mitral valve. Regardless, the overall normal cardiac structure and function for age indicates that the risk of future complication is low. No indication for cardiac medications. Conservative



SonoPath.com
1-800-838-4268 info@sonopath.com

PATIENT

Carson Story

SPECIES

Canine

BREED

Lab

SEX

Neutered Male

AGE

12 Years

WEIGHT

60

INTERPRETED BY

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

IMAGING PERFORMED BY

Tasha

HOSPITAL NAME

Dillsburg Vet Clinic

REFERRING VET

Dr. Jacobs

INVOICE

25979

DATE

9/30/21

monitoring of heart murmur or for clinical signs associated with heart disease would be appropriate. Recheck echo suggested in 6 months, sooner if clinical signs develop.

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