



PATIENT

Oscar Miller

SPECIES

Canine

BREED

Min Schnauzer Mix

SEX

NM

AGE

9 years

WEIGHT

6.5

INTERPRETED BY

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

IMAGING PERFORMED BY

Tasha

HOSPITAL NAME

Dillsburg VC

REFERRING VET

Dr. Crow

INVOICE

14117

DATE

6/16/22

PRESENTING CLINICAL SIGNS

-newly diagnosed murmur 4-5/6; Lungs clear, non symptomatic. Started Enalapril in May.

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	<1.3	28-40	40-100	<0.6
PATIENT				1.3	43.3	77.9	0.2
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		2.4	2.4	

Cardiac Presentation

The echocardiogram in this patient demonstrated normal **left atrial** size based on 3 different LA measurement methods. Chamber volumes and echogenicity were subjectively normal. The cranial and caudal **mitral** valve leaflets presented subjective vegetative thickening, more prominent in the anterior leaflet suggestive of 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 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.

ULTRASONOGRAPHIC FINDINGS

- Overtly normal cardiac structure and function
- Probable compensated chronic mitral valve disease (ACVIM B1)



PATIENT

Oscar Miller

SPECIES

Canine

BREED

Min Schnauzer Mix

SEX

NM

AGE

9 years

WEIGHT

6.5

INTERPRETED BY

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

IMAGING PERFORMED BY

Tasha

HOSPITAL NAME

Dillsburg VC

REFERRING VET

Dr. Crow

INVOICE

14117

DATE

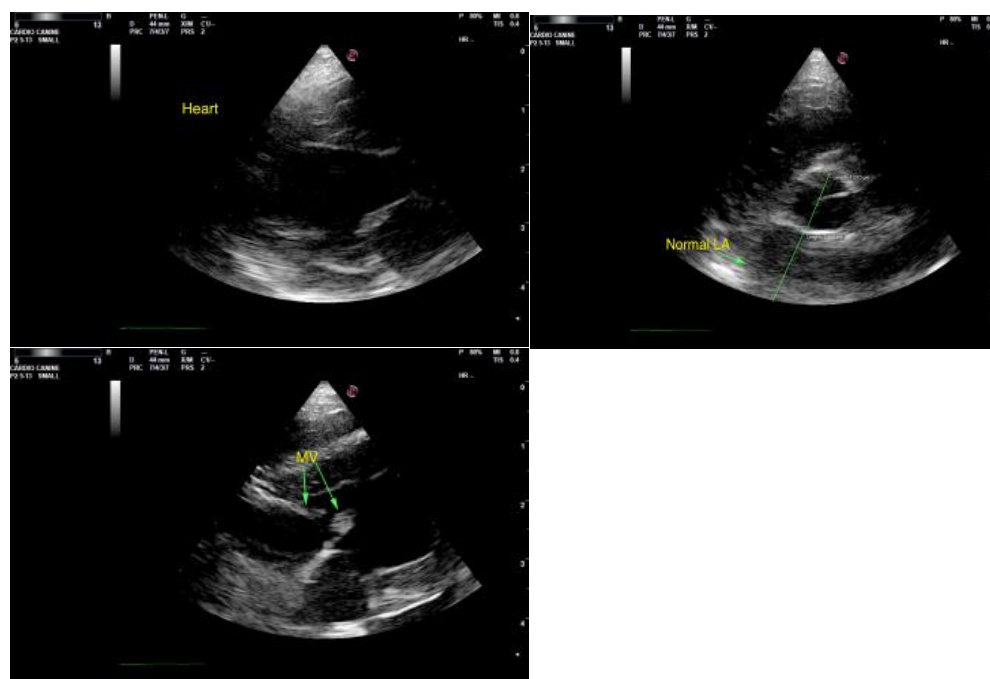
6/16/22

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

Chronic degenerative valvular disease causing mitral valve insufficiency is suspected. The possibility of an alternative flow abnormality or valvular insufficiency cannot be definitively excluded, yet given the mitral valve appearance, compensated chronic mitral valve disease is considered most likely. The lack of left or right heart chamber enlargement and lack of additional clinical issues such as LV systolic dysfunction indicates that the current and future risk secondary to the murmur is relatively low. Likewise, given the lack of left or right heart chamber enlargement and non-symptomatic patient, cardiac medications are not overtly indicated.

Serial sonographic monitoring is required for further prognosis. Recheck echocardiogram is recommended in 6 months, sooner if clinical signs arise. No overt anesthetic contraindications if anesthesia is required. The following protocol is suggested;

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.



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