



PATIENT PRESENTING CLINICAL SIGNS

Libby O'Neil Grade 3/6 systolic murmur, at times increased respiratory rate - normal tracheal elevation, enlarged heart. Had Convenia injection.

SPECIES ULTRASONOGRAPHIC EXAMINATION OF THE HEART

Canine

BREED

Yorkshire Terrier

SEX

Intact Female

AGE

12 Years

WEIGHT

7.4 Pounds

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	5.2	<2.0	2.0	2.4	43.5	76.5	0.18
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	100	1.5	0.9		2.6	2.69	

Cardiac Presentation

INTERPRETED BY

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

IMAGING PERFORMED BY

Kelly Vazquez

HOSPITAL NAME

North Jersey AH

REFERRING VET

Dr. Mark Reidel

The echocardiogram for this patient presented moderately excessive **left atrial size** expressed both in the LA/AO and LA max measurements. Subtle deviation of the intraatrial septum towards the right atrium noted, suggestive of probable mild increased left atrial pressure. The cranial and caudal **mitral** valve leaflets presented vegetative thickening consistent with endocardiosis with mild prolapse of the septal leaflet. Doppler indicated measurable eccentric insufficiency. The **left ventricle** presented normal thicknesses with maintained linear contour and mild increased left ventricular volume. 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.

INVOICE

34019

ULTRASONOGRAPHIC FINDINGS

- Chronic mitral valve disease (ACVIM B2)

DATE

1/6/22

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

The cause of the murmur is chronic degenerative valvular changes with mild septal leaflet prolapse and secondary eccentric mitral valve insufficiency. No other clinical issues such as systolic dysfunction or



PATIENT

Libby O'Neil

evidence of clinical pulmonary hypertension were present. The moderate left atrial enlargement indicates that the risk going forward of clinical signs and decompensation is elevated. Pimobendan 0.3 mg/kg PO BID recommended, as this medication may help prolong cardiac changes associated with mitral valve insufficiency. Assuming no evidence of cardiogenic pulmonary edema, a weak diuretic such as Spironolactone at 1-2 mg/kg PO BID may prove beneficial. Baseline monitoring of resting respiration rate advised. Assessment and monitoring of blood pressure would be ideal. Recheck echocardiogram suggested in 6 months, sooner if clinical signs consistent with left-sided heart disease develop.

SPECIES

Canine

BREED

Yorkshire Terrier

SEX

Intact Female

AGE

12 Years

WEIGHT

7.4 Pounds

INTERPRETED BY

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

IMAGING PERFORMED BY

Kelly Vazquez

HOSPITAL NAME

North Jersey AH

REFERRING VET

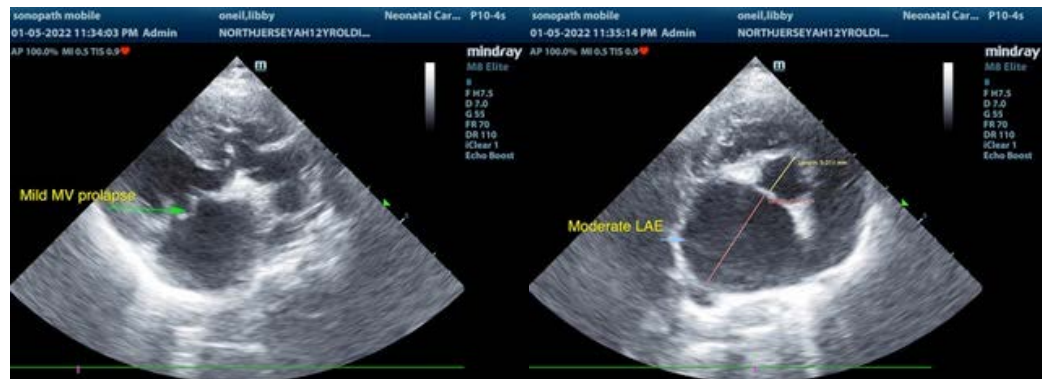
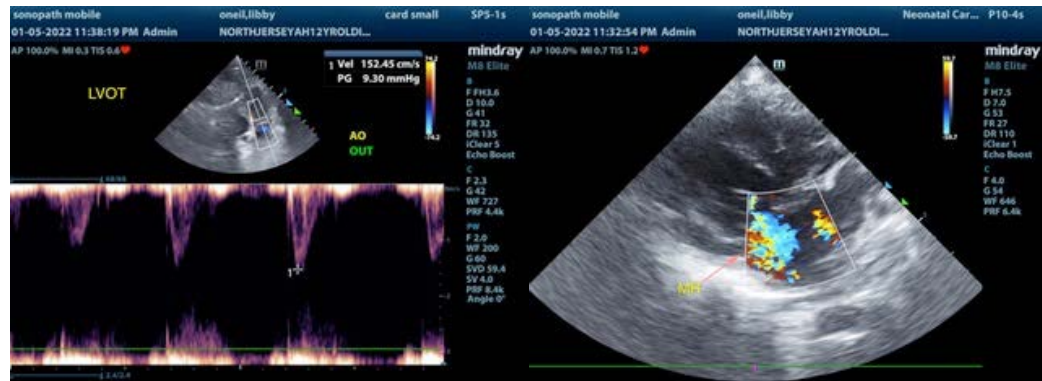
Dr. Mark Reidel

INVOICE

34019

DATE

1/6/22





PATIENT

Libby O'Neil

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.

SPECIES

Canine

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.

BREED

Yorkshire Terrier

R. McKenzie Daniel, DVM, DABVP (Canine / Feline Practice)
info@SonoPath.com

SEX

Intact Female

AGE

12 Years

WEIGHT

7.4 Pounds

INTERPRETED BY

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

**IMAGING
PERFORMED BY**

Kelly Vazquez

HOSPITAL NAME

North Jersey AH

REFERRING VET

Dr. Mark Reidel

INVOICE

34019

DATE

1/6/22