


PATIENT PRESENTING CLINICAL SIGNS

Owen Virtue History: follow-up on cardiac patient. On benazapril 5 mg x 1/2 q 12 hours; furosemide 12.5 mg x 1/2 Q 12 hours

SPECIES Abnormal PE/Chem/CBC/UA Results: n/a

Canine

ULTRASONOGRAPHIC EXAMINATION OF THE HEART
BREED

Minature Schnauzer

SEX

NM

AGE

17 years

WEIGHT

14.6 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	<1.3	28-40	40-100	<0.6
PATIENT	5.3	4	2.26	2.3	41.1	72.5	0.29
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	120	1.2	0.75		4.1	4.1	

INTERPRETED BY

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

Cardiac Presentation

The echocardiogram for this patient presented moderate left atrial size expressed both in the LA/AO and LA max measurements. Deviation of the intra atrial septum towards the right atrium consistent with increased left atrial pressure was present. The cranial and caudal mitral valve leaflets presented significant vegetative thickening consistent with endocardiosis. Doppler indicated measurable moderate eccentric insufficiency. The left ventricle presented normal thicknesses with maintained linear contour and moderate increased left ventricle 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 concurrent vegetative thickening with mild to moderate 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). 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.

IMAGING PERFORMED BY
Diane McFadden

HOSPITAL NAME

Advanced Veterinary
Care

REFERRING VET

Dr. Weingartner

INVOICE

10500ag

DATE

05/02/2022



PATIENT

Owen Virtue

SPECIES

Canine

BREED

Minature Schnauzer

SEX

NM

AGE

17 years

WEIGHT

14.6 pounds

INTERPRETED BY

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

IMAGING PERFORMED BY

Diane McFadden

HOSPITAL NAME

Advanced Veterinary
Care

REFERRING VET

Dr. Weingartner

INVOICE

10500ag

DATE

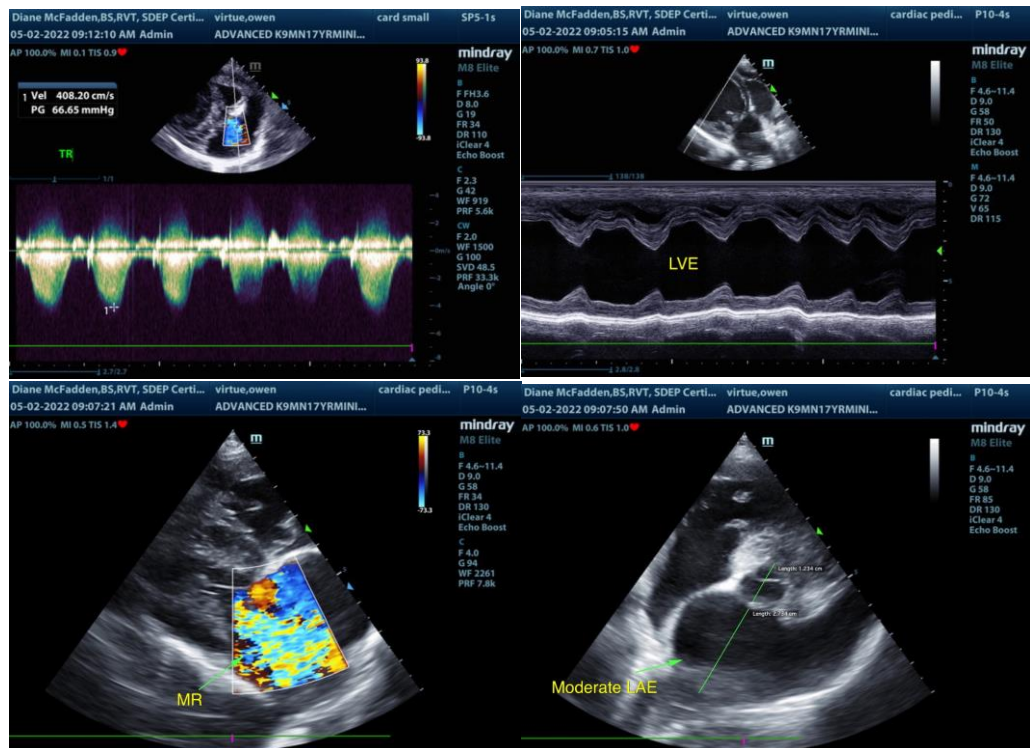
05/02/2022

ULTRASONOGRAPHIC FINDINGS

- Chronic mitral valve disease (ACVIM B2-C) with left heart volume overload
- TR-estimated pulmonary pressure gradient approximately 65 mmHg consistent with moderate pulmonary hypertension

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

The moderate LA/LV enlargement indicates that the relative risk of current and future complications secondary to left heart volume overload are significantly elevated. Three view chest radiographs are suggested to assess for evidence of pulmonary edema. Monitoring of resting respiration rate is recommended. Pimobendan 0.3 mg/kg PO BID along with lowest effect dose of diuretic 1-2 mg/kg PO BID is warranted. Assessment of systemic BP is suggested. If BP is >130, ACE inhibitor medication would be appropriate (not advised if BP is <130). Although not definitive, the pulmonary hypertension is suspected to be secondary to left heart volume overload. Serial sonographic monitoring is required for further prognosis. Close monitoring for clinical signs suggestive of clinical pulmonary hypertension i.e. syncope is suggested. Recheck echocardiogram recommended in 6 months, sooner if progressive clinical signs are noted. Exercise restriction is advised in this patient. Monitoring of renal parameters is recommended while on diuretic therapy.





PATIENT

Owen Virtue

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.

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.

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

BREED

Minature Schnauzer

info@SonoPath.com

SEX

NM

AGE

17 years

WEIGHT

14.6 pounds

INTERPRETED BY

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

**IMAGING
PERFORMED BY**

Diane McFadden

HOSPITAL NAME

Advanced Veterinary
Care

REFERRING VET

Dr. Weingartner

INVOICE

10500ag

DATE

05/02/2022