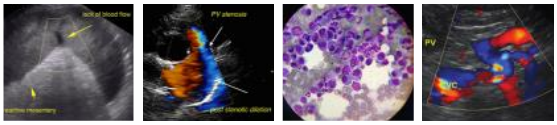
SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™
1-800-838-4268 info@sonopath.com SonoPath.com



ANIMAL SOUNDS NW
MOBILE VETERINARY ULTRASOUND
IMAGING PERFORMED BY
AnimalSoundsNW.com 541-357-9423

PATIENT
Francis Crone

SPECIES
Canine

BREED
Border Collie

SEX
FS

AGE
11yr

WEIGHT
~40lb

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

IMAGING PERFORMED BY
Sara Hansen

HOSPITAL NAME
Alpine Animal Hospital

REFERRING VET
Dr. Mills

INVOICE
14438ag

DATE
07/28/2023

PRESENTING CLINICAL SIGNS

enlarged heart

Abnormal PE/Chem/CBC/UA Results: Heart Rate and Respiratory Rates 100 Blood Pressure Measurments not taken

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	5.0	<2.0		2.6	38	70	0.35
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	1.4	0.95		6.2	5.2	

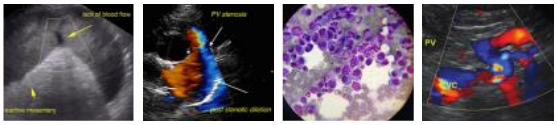
Cardiac Presentation

The echocardiogram for this patient presented severe increased left atrial size expressed both in the LA/AO and LA max measurements. Deviation of the interatrial septum towards the right atrium suggestive of increased left atrial pressure was noted. The cranial and caudal mitral valve leaflets presented mild thickening consistent with endocardiosis with lack of valve coaptation owing to LA enlargement. Doppler indicated measurable moderate primarily eccentric insufficiency. The left ventricle presented normal to mild decreased thicknesses with linear contour and marked increased LV 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 mild thickening with minor 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. No overt arrythmia.

ULTRASONOGRAPHIC FINDINGS

- Severe LA/LV enlargement consistent with left heart volume overload.

SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™
1-800-838-4268 info@sonopath.com SonoPath.com



ANIMAL SOUNDS NW
MOBILE VETERINARY ULTRASOUND
IMAGING PERFORMED BY
AnimalSoundsNW.com 541-357-9423

PATIENT

Francis Crone

SPECIES

Canine

BREED

Border Collie

SEX

FS

AGE

11yr

WEIGHT

~40lb

INTERPRETED BY

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

IMAGING PERFORMED BY

Sara Hansen

HOSPITAL NAME

Alpine Animal Hospital

REFERRING VET

Dr. Mills

INVOICE

14438ag

DATE

07/28/2023

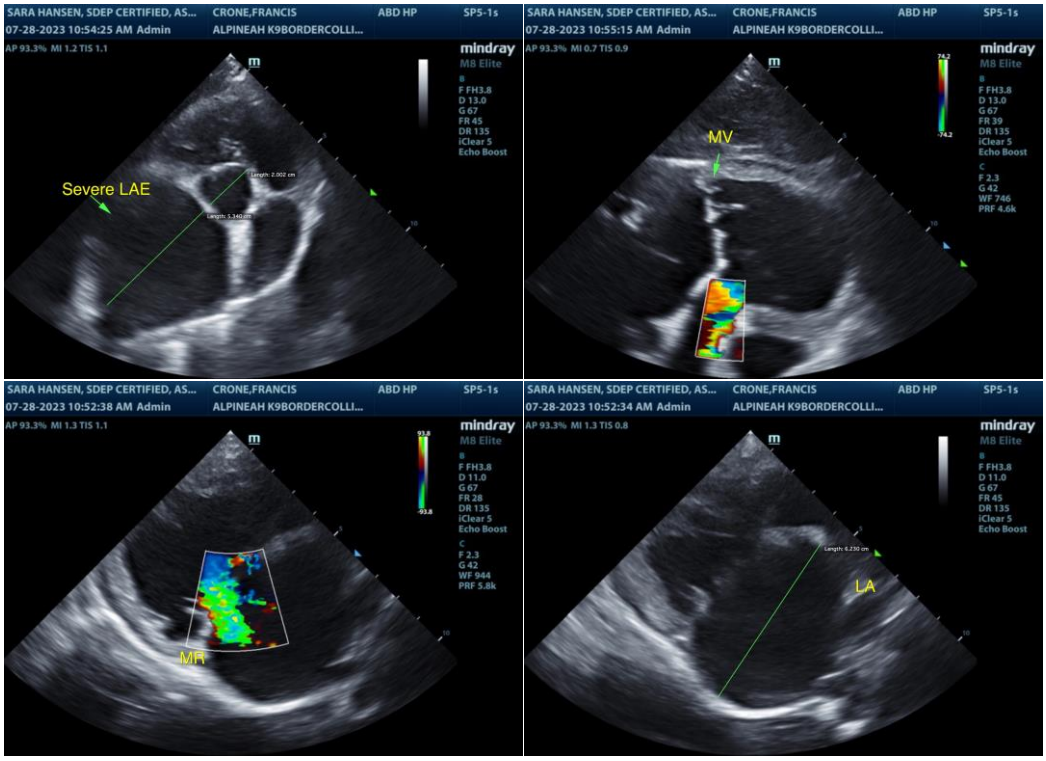
- Thickened mitral valve with lack of valve coaptation-consistent with endocardiosis.
- Eccentric MR.
- Normal RA/RV, trace TR-no evidence of clinical pulmonary hypertension.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

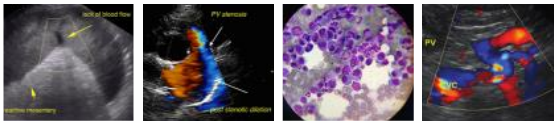
The study is consistent with chronic degenerative valvular changes with secondary eccentric mitral valve insufficiency and marked left heart volume overload. DCM criteria is not met. The degree of left heart volume overload implies that the risk of complication secondary to mitral valve insufficiency is severely elevated with high potential for congestive criteria.

Pimobendan 0.3 mg/kg PO BID, combination Lasix/spironolactone both 1-2 mg/kg PO BID and ACE inhibitor medication if systemic BP is >130 (not advised if systemic BP is <130) is recommended. Baseline monitoring of resting RR and for evidence of pulmonary edema is recommended. Omega fatty acids and mild salt restriction may prove beneficial. This patient remains at high risk for progressive CHF and/or development of malignant arrhythmias.

Serial sonographic monitoring is recommended with a recheck echocardiogram in 4-6 months, sooner if progressive clinical signs are noted.



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.



PATIENT

Francis Crone

SPECIES

Canine

BREED

Border Collie

SEX

FS

AGE

11yr

WEIGHT

~40lb

INTERPRETED BY

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

IMAGING PERFORMED BY

Sara Hansen

HOSPITAL NAME

Alpine Animal Hospital

REFERRING VET

Dr. Mills

INVOICE

14438ag

DATE

07/28/2023

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