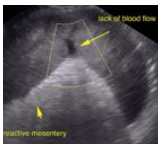
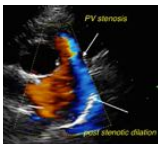
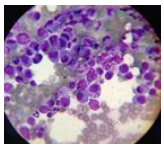
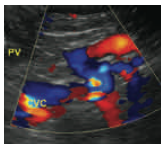
SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™

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

PATIENT

Odin Bartusek

SPECIES

Canine

BREED

Chihuahua Cross

SEX

Neutered male

AGE

13 years

WEIGHT

5 kg

INTERPRETED BY

Eric Lindquist, DMV DABVP, Cert. IVUSS

IMAGING PERFORMED BY

Dr. Belan

HOSPITAL NAME

Signall Hill Animal Clinic

REFERRING VET

Dr. Sweet

INVOICE

95585

DATE

1/26/22

PRESENTING CLINICAL SIGNS

Patient presented for a second opinion on irregular heart beat. HR 30 bpm with 3 or 4 soft sounds followed by a normal heart sound. Patient is non clinical for heart disease and not on any cardiac medications. No history of syncope or cough. Patient does have little thoracic intention tremors every 5-10 minutes. Chest x rays attached. enlarged liver seen on lateral x rays.

ULTRASONOGRAPHIC EXAMINATION OF THE HEART

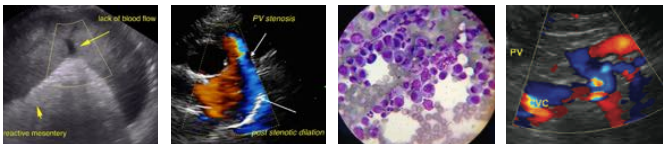
The echocardiogram in this patient demonstrated normal **left atrial** size based on 3 different LA measurement methods. Chamber volumes and echogenicity were normal. The cranial and caudal **mitral** valve leaflets presented vegetative thickening consistent with endocardiosis. Doppler indicated trivial insufficiency, likely more of leakage based on arrhythmia as opposed to primary structural disease. 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. Persistent bradyarrhythmia was noted.

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			1.0	1.0	69	96	NM
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		1.5		5		2.49	

ULTRASONOGRAPHIC FINDINGS

Trivial mitral insufficiency with severe bradyarrhythmia. Suspect heart block. MR is likely secondary to periods of bradycardia and physiological reflux.

SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™



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

PATIENT

Odin Bartusek

SPECIES

Canine

BREED

Chihuahua Cross

SEX

Neutered male

AGE

13 years

WEIGHT

5 kg

INTERPRETED BY

Eric Lindquist, DMV DABVP, Cert. IVUSS

IMAGING PERFORMED BY

Dr. Belan

HOSPITAL NAME

Signall Hill Animal Clinic

REFERRING VET

Dr. Sweet

INVOICE

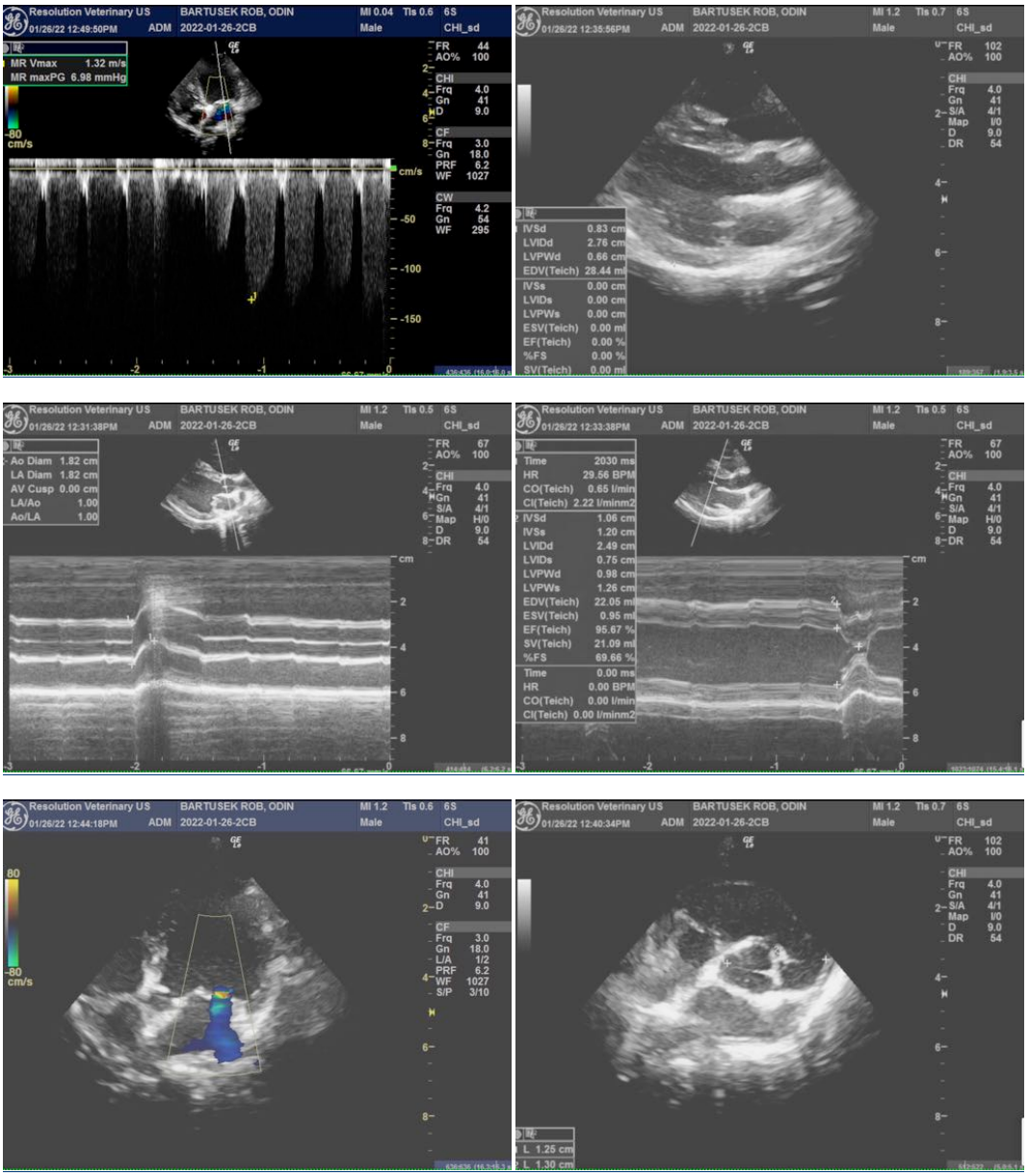
95585

DATE

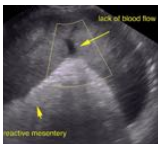
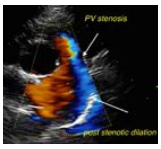
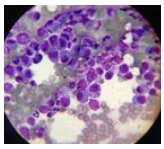
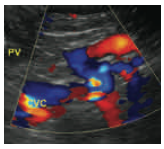
1/26/22

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

I recommend treatment based on EKG findings. Pace maker may be appropriate depending upon EKG findings. No specific cardiac medications are warranted. However, the arrhythmia is significant and should be addressed as soon as possible. There was no evidence of volume overload.



SonoPath
Clinical Sonography & Telecytology
EDUCATIONAL TELECONSULTATION SERVICES™

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

PATIENT

Odin Bartusek

SPECIES

Canine

BREED

Chihuahua Cross

SEX

Neutered male

AGE

13 years

WEIGHT

5 kg

INTERPRETED BY

Eric Lindquist, DMV DABVP, Cert. IVUSS

IMAGING PERFORMED BY

Dr. Belan

HOSPITAL NAME

Signall Hill Animal Clinic

REFERRING VET

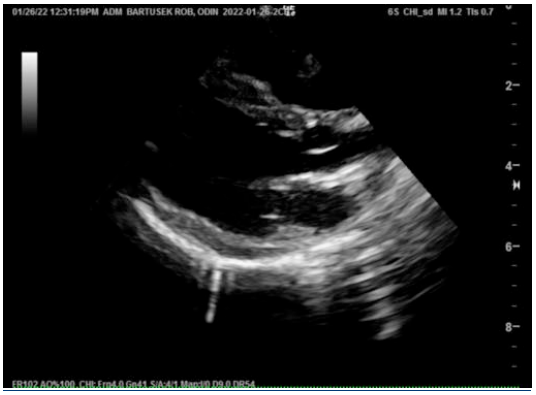
Dr. Sweet

INVOICE

95585

DATE

1/26/22



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.

Eric Lindquist, DMV, DABVP, Cert. IVUSS, CEO of SonoPath.com
info@SonoPath.com