

PATIENT	PRESENTING CLINICAL SIGNS
Penny Sorenson	History: H/O frequent VPCs. Grade 2/6 murmur noted in 2020; currently grade 3/6. BP: 166mmHg.
SPECIES	RADIOGRAPHIC FINDINGS *NOTE: Images submitted for supplemental cardiac information only.
Canine	Normal cardiac silhouette. No obvious evidence of CHF.
BREED	ELECTROCARDIOGRAPHIC FINDINGS *Note: Single lead ECGs are evaluated as a rhythm strip. Morphology/MEA cannot be definitively commented on.
Chow Mix	A single lead ECG is available; 25mm/s, 10mm/mV, 30s duration. The average heart rate is 120bpm (range 107-136bpm). P waves are difficult to visualize consistently; however, a sinus origin is suspected. The QRS is low voltage. A single VPCs is noted. Two single APCs are noted. No pauses or other dysrhythmias observed.
SEX	ECG diagnosis: Normal sinus rhythm with respiratory variation. Isolated rare APCs and VPCs.
FS	
AGE	INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS
14 years	The ECG confirms rare ventricular premature contractions (VPCs) as well as atrial premature contractions (APCs); collectively known as ectopic beats. Ectopic beats are generated from abnormal conductive or fibrotic tissue in the ventricles of the heart muscle, and even frequent single ectopic beats will often cause no clinical signs in dogs. When sustained however, ventricular tachycardia or SVT can lead to symptoms such as lethargy, collapse and sudden death.
WEIGHT	Ectopic beats are a very non-specific finding. They can be primary in origin (ie arrhythmic disease such as ARVC), or develop secondary to significant cardiac or extra-cardiac disease ie due to pain, stress, inflammation, cancer, GI disease, DIC/sepsis, etc. All differentials should be ruled out. The first step would be an echocardiogram to assess cardiac structure and function given the reported heart murmur. That being said, no cardiomegaly is seen on the films suggesting the disease if present is well compensated for. An abdominal ultrasound to monitor for any underlying abnormalities can also be considered, in addition to senior labs, tick titers, etc.
24lbs	Unfortunately there is always an elevated risk for collapse and sudden death in any arrhythmic patient, and even on medications this risk unfortunately still persists.
INTERPRETED BY	Based strictly upon the amount of arrhythmia present on the available ECG (rare), anti-arrhythmic therapy is not clearly indicated. A holter monitor is the gold standard to allow monitoring of the rhythm throughout 24 hours of a normal day and help understand the true extent of the abnormality and if treatment is indicated, particularly should the patient develop clinical signs in the future.
Maggie Machen Lamy, DVM, DACVIM (Cardiology)	If needed, anesthetic protocol should avoid ketamine, telazol, and/or alpha 2 agonists. Careful monitoring of ECG/blood pressure is highly recommended with intervention as needed (ie sustained tachyarrhythmias).
IMAGING PERFORMED BY	Fish oil supplementation is recommended for dogs with arrhythmias (500-1000mg of omega 3 and 6 once to twice daily).
Kim Liedberg	Monitor at home for collapse, exercise intolerance, and/or lethargy. If a holter monitor is elected, this will dictate whether therapy is needed and follow up protocol.
HOSPITAL NAME	INVOICE
SVS-WI	Plan: Consider holter monitor/echo/systemic evaluation as discussed.
REFERRING VET	A recheck ECG is recommended in 6 months, sooner if symptoms of cardiac disease arise (cough, labored breathing, etc).
Dr. Long, CVS	
INVOICE	
25178	
DATE	
7/6/22	



PATIENT

Penny Sorenson

SPECIES

Canine

BREED

Chow Mix

SEX

FS

AGE

14 years

WEIGHT

24lbs

INTERPRETED BY

Maggie Machen Lamy,
DVM, DACVIM
(Cardiology)

**IMAGING
PERFORMED BY**

Kim Liedberg

HOSPITAL NAME

SVS-WI

REFERRING VET

Dr. Long, CVS

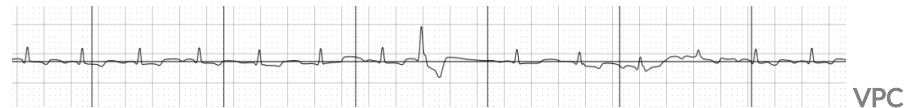
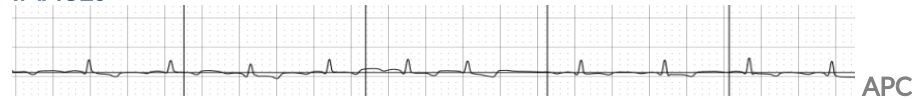
INVOICE

25178

DATE

7/6/22

IMAGES



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.

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.

Maggie Machen Lamy, DVM
Diplomate of the American College of Veterinary Internal Medicine (Cardiology)
info@sonopath.com