



## PATIENT

Barbie Guthrie

## SPECIES

Canine

## BREED

Labrador

## SEX

FS

## AGE

13 years

## WEIGHT

59lbs

## INTERPRETED BY

Maggie Machen Lamy,  
DVM, DACVIM  
(Cardiology)

## IMAGING PERFORMED BY

## HOSPITAL NAME

Bluegrass Animal  
Hospital

## REFERRING VET

Dr. Disney

## INVOICE

45678

## DATE

11/10/25

## PRESENTING CLINICAL SIGNS

History: P diagnosed with Cushing's disease and hypertension about 6 months ago. Previous history of idiopathic old dog vestibular disease: resolved P is on amlodipine 7.5 mg per day and trilostane 20 mg BID Arrhythmia ausculted 1 week ago, no clinical signs

Abnormal PE/Chem/CBC/UA Results: Historically mildly increased ALT and ALKP, no other abnormalities

## ELECTROCARDIOGRAPHIC FINDINGS \*Note: Single lead ECGs are evaluated as a rhythm strip.

Morphology/MEA cannot be definitively commented on.

A single lead ECG is available 25mm/s. The average heart rate is 150bpm. The underlying rhythm is sinus in origin, with a p for every QRS complex and vice versa. The P and QRS morphologies are positive. Premature beats noted throughout most consistent with VPCs. No obvious supraventricular ectopic beats, pauses or other dysrhythmias observed.

ECG diagnosis: Normal sinus rhythm with premature beats (suspect VPCs).

## INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

The ECG is most consistent with ventricular premature contractions (VPCs). The tracing is difficult to evaluate (screenshots in an atypical orientation, single lead), and an atrial origin cannot be ruled out. A 6 lead tracing is recommended in this case.

If confirmed, VPCs are generated from abnormal conductive or fibrotic tissue in the ventricles of the heart muscle, and even frequent single VPCs will often cause no clinical signs in animals (as is seen here). When sustained however, ventricular tachycardia can lead to symptoms such as lethargy and collapse, and ultimately can lead to fibrillation and sudden death.

When addressing arrhythmias, two things must be considered; 1. Is an underlying cause evident or is this primary arrhythmic disease? And 2. Is anti-arrhythmic therapy warranted?

VPCs are a very non-specific finding. They can be due to significant cardiac disease or be extra-cardiac in origin; ie due to pain, stress, inflammation, cancer, GI disease, DIC/sepsis, etc. In this senior dog, all differentials should be ruled out. An echocardiogram to assess cardiac structure and function would be a reasonable first step, in addition to CXR as a baseline and metastatic screen. An abdominal ultrasound reportedly showed abnormalities, and lab work should also be assessed. Reassessing BP to ensure adequate control is also recommended.

Electing to treat arrhythmias is based upon clinical signs and amount/degree of arrhythmia identified. 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. Based strictly upon the amount of arrhythmia present on the available ECG, anti-arrhythmic therapy is not indicated. The markers of malignancy (such as polymorphism, sequential VPCs, tight coupling interval, etc) and frequency are both low. A holter monitor would be ideal to understand the true extent of the abnormality if desired.

Monitor at home for collapse, exercise intolerance, and/or cough. Mild activity restriction is advised in arrhythmic patients.

With ventricular arrhythmias, anesthetic risk is considered moderately elevated if needed. Avoid ketamine, telazol, dexdomitor (or other alpha-2 agonists) and acepromazine. Recommend having lidocaine CRI available for use in the event of worsening ventricular arrhythmias under anesthesia (CRI 50–75mcg/kg/min)



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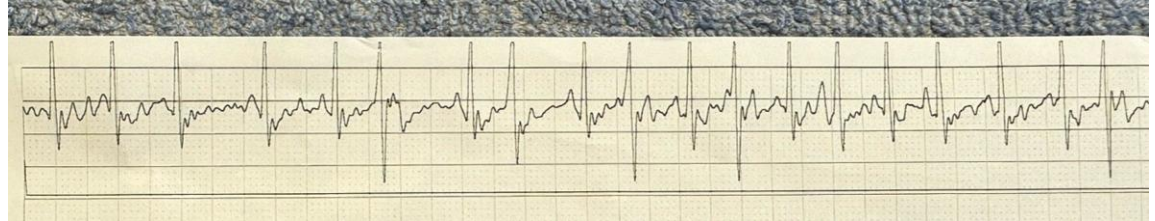
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Plan: Recommend further work up, holter monitor. Consider obtaining a 6 lead tracing with referral if necessary.

Pending results, a recheck ECG is recommended in 6 months to assess for progression, sooner if any clinical signs arise in the interim.

**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. This report was generated using transcription software, and minor dictation errors may be present. If the clinical or image interpretation does not parallel your findings or if I can be of any further assistance, please contact me.

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