


**PATIENT**

Perfect Koepfel

**PRESENTING CLINICAL SIGNS**

History: Hypertension. Intermittent arrhythmia.

**SPECIES**

Canine

**HOLTER MONITOR FINDINGS AND RHYTHM ASSESSMENT**
**BREED**

Standard Poodle

Time analyzed	22:24h
Mean heart rate	89bpm
Maximum heart rate	251bpm
Minimum heart rate	51bpm
VPCs	1222; 12 pairs
APCs	0

**SEX**

FS

Interpretation: Underlying normal sinus rhythm with appropriate rate variation. Significant sinus tachycardia is seen with stress/activity; however, appropriate drop in rate with rest. Isolated VPCs throughout; primarily singles and monomorphic. Occasional couplets; no R on T. No triplets or VT identified.

**AGE**

9 years

Rhythm diagnosis: Sinus rhythm with isolated VPCs and occasional couplets.

**WEIGHT**

90 lbs

**RECOMMENDATIONS**

The monitor documents primarily a normal sinus rhythm with VPCs throughout. While both the numeric count (>1000) and finding of occasional couplets is concerning, the overall markers of malignancy are low without polymorphis, runs are VT, etc appreciated. The patient does also have frequent sinus tachycardia which appears largely benign.

**INTERPRETED BY**

 Maggie Machen Lamy,  
 DVM, DACVIM  
 (Cardiology)

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.

**IMAGING PERFORMED BY**

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?

**HOSPITAL NAME**

Rockaway AH

VPCs are a very non-specific finding. They can be primary in nature, 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 a senior dog, an echocardiogram is HIGHLY recommended as the next step, followed by systemic evaluation.

**REFERRING VET**

Dr. Maniar

In the absence of markers of malignancy (polymorphism, R on T, triplets, etc.), there is no clear indication for anti-arrhythmic therapy at this time. Recommend close monitoring at home for any associated clinical signs including acute lethargy or collapse.

**INVOICE**

25948

Any animal with VPCs has the risk for sustained arrhythmias such as VT/VF and potential for sudden death and this should be expressed to the owner.

**DATE**

8/22/22

Fish oil supplementation is recommended for dogs with arrhythmias (1000mg of omega 3/6 once to twice daily).



## PATIENT

Perfect Koepfel

Pending echo evaluation, anesthetic risk is considered moderately elevated. 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).

## SPECIES

Canine

Plan: Echocardiogram and systemic evaluation recommended.

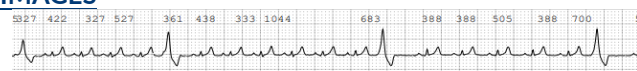
A recheck ECG and/or holter monitor is recommended in 6 months to screen for progression, sooner if any symptoms such as collapse are noted.

## BREED

Standard Poodle

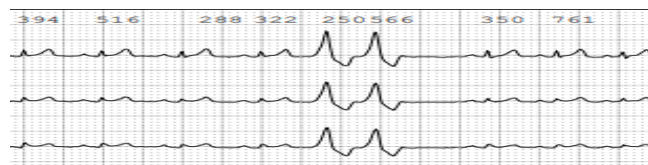
## IMAGES

## SEX



Frequent VPCs

## FS



Occ couplets

## AGE

9 years

## WEIGHT

90 lbs

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.

## INTERPRETED BY

Maggie Machen Lamy,  
DVM, DACVIM  
(Cardiology)

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

## IMAGING PERFORMED BY

## HOSPITAL NAME

Rockaway AH

## REFERRING VET

Dr. Maniar

## INVOICE

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## DATE

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