


PATIENT

Hope Butzier

PRESENTING CLINICAL SIGNS

History: While standing calmly on the exam table at routine physical, periodic runs of tachycardia.

Current medications: None.

Echo results (1/2021 EL): NSF

ECG results (1/2021 KB): Sinus with a single PVC

SPECIES

Canine

HOLTER MONITOR FINDINGS AND RHYTHM ASSESSMENT
BREED

Leonburger

Time analyzed	23:36h
Mean heart rate	92bpm
Maximum heart rate	276bpm
Minimum heart rate	55bpm
VPCs	0
APCs	19

SEX

FI

AGE

1y

Interpretation: Underlying normal sinus rhythm with appropriate rate variation. During reported activity, sinus tachycardia is seen (see below) with rates up to 250bpm. More concerning is during periods of rest, single and couplet APCs are noted with brief paroxysms of SVT (atrial tachycardia). No ventricular beats are seen.

WEIGHT

111lbs

Rhythm diagnosis: Sinus rhythm with atrial arrhythmias.

INTERPRETED BY

 Maggie Machen Lamy,
 DVM, DACVIM
 (Cardiology)

RECOMMENDATIONS

The majority of the tracing is unremarkable with normal heart rate and rhythm. There are however occasional APCs, and brief paroxysms of SVT/atrial tachycardia (no more than 4 beats in each paroxysm). SVT is an umbrella term indicating a narrow complex tachycardia arising from above the AV node with an atrial tachycardia is most likely.

IMAGING PERFORMED BY

Given a normal echocardiogram, there is no clear structural cause for this abnormality. The most likely scenario is that this is a primary arrhythmic issue in a young dog, with potentially an underlying anomaly such as an accessory pathway. Full systemic evaluation is recommended to ensure no exacerbating issues are brewing (such as neoplasia, GI inflammation, etc); however, in a young animal this is unlikely. Fortunately SVT tends to be less malignant than a VT; however, any arrhythmic patient is at risk for syncope and sudden death which must be stated. That being said, the findings in this holter are mild and non-sustained and the patient is asymptomatic.

HOSPITAL NAME

Neumeister AH

Going forward, there are several options in this young asymptomatic dog. First would be to simply recheck the heart rhythm in 6-12 months, sooner if any syncope or acute lethargy are noted in the interim. An alternative option would be refer for advanced arrhythmia evaluation, starting with a 6-lead tracing. This could be performed with a local cardiologist, or potentially with an EP specialist (academic institution or similar). The reason for this would be to determine the likely underlying cause if any (such as an accessory pathway), and determine if advanced treatment such as ablation would be indicated in a young dog to prevent further issues.

REFERRING VET

Dr. Neumeister

Without further information, lifelong use of an anti-arrhythmic is not recommended at this time. What is seen here is mild; however, if the patient develops any syncope in the future or sustained arrhythmias are seen on follow up ECG/holter monitoring, this will certainly change.

INVOICE

22392

Omega fatty acid supplementation may be of some long term benefit in arrhythmic animals. Monitor for development of a cough, labored breathing, exercise intolerance or collapse

DATE

2/7/22



PATIENT

episodes.

Hope Butzier

Plan: Consider systemic evaluation as discussed. Consider referral v monitoring as discussed.

SPECIES

If referral is declined, recheck echocardiogram in 1 year; recheck ECG/holter in 6-12 months, sooner if any clinical signs are noted.

Canine

BREED

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SEX

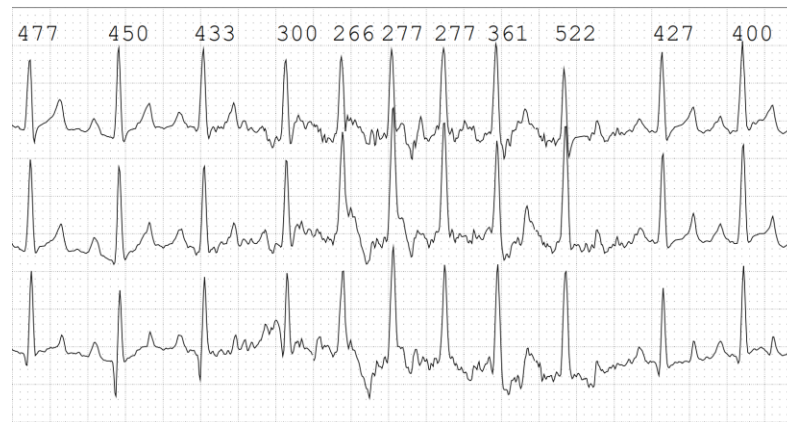
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IMAGES



AGE

1y



WEIGHT

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INTERPRETED BY

Maggie Machen Lamy, DVM, DACVIM (Cardiology)

IMAGING PERFORMED BY

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.

HOSPITAL NAME

Neumeister AH

Maggie Machen Lamy, DVM
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REFERRING VET

Dr. Neumeister

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