
PATIENT

Joker Stubel

SPECIES

Canine

BREED

Boxer

SEX

Male Neutered

AGE

2014

WEIGHT

93 lbs

INTERPRETED BY

 Maggie Machen Lamy,
 DVM, DACVIM
 (Cardiology)

IMAGING PERFORMED BY
HOSPITAL NAME

Northvale VH

REFERRING VET

Dr. Simon

INVOICE

31353

DATE

6/14/23

PRESENTING CLINICAL SIGNS

History: Recently had recheck echo. History of historical ventricular ectopy. In April 2020, when the patient was 6 years old, he had a 2-collapsing episode following excitement. Abd: mass in region of epigastric, otherwise WNL. ECHO: structurally normal heart, recommend Holter monitor. Results of Holter from 5/21/2020: 125 VPCs over 1 week; one high speed paroxysmal run of ventricular tachycardia (4 beats at 375 bpm) and a multiform couplet at ~ 350 bpm; started Sotalol 40 mgs PO Q12 hrs.

-Current medications: Vetmedin 11.25mg PO q12h. Sotalol 40mg PO q12h. Gabapentin.
 Echo findings (5/2023 MML): DCM with 4 chamber enlargement/MR

HOLTER MONITOR FINDINGS AND RHYTHM ASSESSMENT

| | |
|--------------------|--|
| Time analyzed | 47:52h |
| Mean heart rate | 93bpm |
| Maximum heart rate | 207bpm |
| Minimum heart rate | 39bpm |
| VPCs | 42617 singles, 4691 pairs, 834 runs (270bpm) |
| APCs | 0 |

Interpretation: Underlying normal sinus rhythm with appropriate rate variation. Frequent VPCs are seen; primarily monomorphic. R on T couplets, triplets and sustained episodes VT are seen. VT appears to be primarily associated with activity based upon the holter. The VT is highly concerning with R on T phenomenon and rates as high as 270bpm.

Rhythm diagnosis: Sinus rhythm with poorly controlled ventricular arrhythmias.

INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

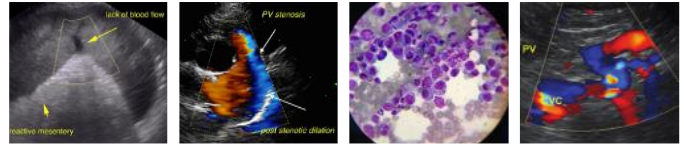
Sinus rhythm with frequent ventricular arrhythmias persists throughout the holter. While the frequency is notable, the R on T couplets and sustained runs of VT are highly concerning.

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. 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? In this case, DCM has been diagnosed previously as the underlying issue. 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.

Given development of dysfunction in addition to this degree of arrhythmia on Sotalol, recommend dual therapy with Mexilitene as below even without recurrent syncope. Ideally reassessing the holter in 2 weeks is ideal. If the response is less than ideal, reassessing the holter and potentially reassessing the echocardiogram may be necessary.

Monitor at home for collapse, exercise intolerance, and/or cough. Due to correlation with heart rate stimulation, lifelong activity restriction is advised in arrhythmic patients.



PATIENT

Anesthesia is not advised.

Joker Stubel

Plan: Recommend institution of mexilitene 5-7mg/kg PO q8h. Continue sotalol as prescribed. Reassess ECG or holter in 1-2 weeks (ie resolution or at least dramatic improvement in the frequency of the arrhythmia would be expected).

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Once controlled, recheck ECG or holter is recommended in 6 months to assess for progression.

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IMAGES

Gain 1.0 cm/mv ECG 25 mm/sec (ALL)



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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.

IMAGING PERFORMED BY

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