

PATIENT

Jax O'Connell

SPECIES

Canine

BREED

Border Collie Mix

SEX

MN

AGE

12 years

WEIGHT

53 lbs

INTERPRETED BY

Maggie Machen Lamy,
DVM, DACVIM
(Cardiology)

IMAGING PERFORMED BY

HOSPITAL NAME

Red River Animal
Emergency Hospital
and Referral

REFERRING VET

Dr. Kuhlman

INVOICE

45670

DATE

11/10/25

PRESENTING CLINICAL SIGNS

History: Progressive, now grade 3/6 heart murmur. Intermittent episodes resembling "hiccups," described as whole-body shakes occurring every 3–4 seconds during these events. ECG showed single and couplet VPCs (MML), echo showed CVD B1. Holter recommended.

DIARY: Limited.

HOLTER MONITOR FINDINGS AND RHYTHM ASSESSMENT

Time analyzed	23:30h
Mean heart rate	75bpm
Maximum heart rate	245bpm
Minimum heart rate	31bpm
VPCs	6151 singles, 3451 pairs, 1541 runs
APCs	0

Interpretation: Underlying normal sinus rhythm with appropriate rate variation. Ventricular premature contractions noted throughout; trigeminy, pairs and brief runs of VT appreciated. Not all runs of ventricular rhythm are >160bpm.

Rhythm diagnosis: Normal sinus rhythm with malignant ventricular arrhythmias.

RECOMMENDATIONS

Sinus rhythm with frequent VPCs is noted throughout the holter. While the frequency is notable (over 6000 in 24 hours), the vast majority are single beats. That said, couplets and triplets are documented, consistent with VT.

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?

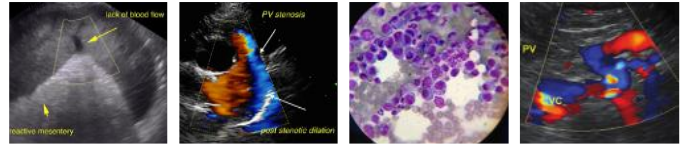
VPCs are a very non-specific finding. They can be primary in nature, be due to significant cardiac disease or be extra-cardiac in origin; ie due to pain, stress, inflammation, cancer, GI disease, DIC/sepsis, etc. **In a senior dog with mild structural disease, this is unlikely to be the cause. Full systemic work up is recommended to ensure no additional issues are brewing.**

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.** Overall the markers of malignancy in this case are relatively low; however, I am concerned with both the frequency of VPCs as well as the complexity. Based upon this, treatment with Sotalol is recommended as below.

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

Anesthesia is NOT advised prior to obtaining adequate rhythm control.

Plan: Institute Sotalol 1-2mg/kg PO q12h. Consider systemic screening.



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Reassess ECG and/or holter in 2-4weeks to assess response (ie resolution or at least dramatic improvement in the frequency of the arrhythmia would be expected).

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A recheck ECG is recommended in 6 months to assess for progression.

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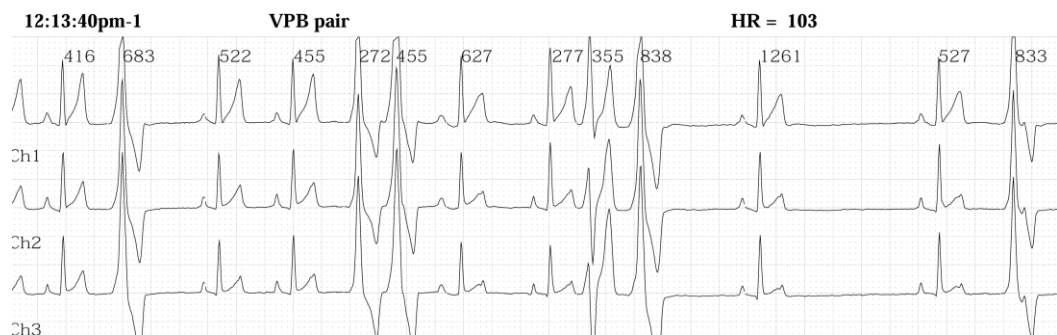
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The information and recommendations provided are based on the images presented by the referring veterinarian. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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

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