



PATIENT

Tyson Quaranta

SPECIES

Canine

BREED

Boxer

SEX

Male Neutered

AGE

9 years

WEIGHT

88 lbs

INTERPRETED BY

Maggie Machen Lamy,
DVM, DACVIM
(Cardiology)

IMAGING PERFORMED BY

HOSPITAL NAME

Straley VA

REFERRING VET

Dr. McFeely

INVOICE

22513

DATE

2/10/22

PRESENTING CLINICAL SIGNS

History: Had an episode of collapse at home in early January, panting and increased respiratory effort observed in clinic on Jan. 6th. Tachycardia with grade 3 murmur at that time. CXR showed increased VHS. Started on Lasix and Pimobendan. Recheck 1-12 he had improved with a normal HR/rhythm. Taurine added. No episodes since.

Pertinent echo findings (1/22/22 EL): FS 20, LVIDd 4.5

HOLTER MONITOR FINDINGS AND RHYTHM ASSESSMENT

Time analyzed	47:19h
Mean heart rate	85bpm
Maximum heart rate	245bpm
Minimum heart rate	39bpm
VPCs	269; 254 premature
APCs	0

Interpretation: Underlying normal sinus rhythm with appropriate rate variation. Max HR is presumably with activity and appears sinus in origin. Isolated VPCs throughout; 245 in 48 hours (<100/24 hours is normal in this breed). No couplets, triplets or runs identified. Occasional escape beats with sinus pauses (a normal finding). No additional issues identified.

Rhythm diagnosis: Sinus rhythm with isolated VPCs.

RECOMMENDATIONS

The holter shows isolated ventricular premature contractions (VPCs) with low markers of malignancy. The abnormal beats are singles only, with a monomorphic appearance. The max heart rate appears sinus in origin, with no couplets, triplets or sustained VT noted.

These findings are most consistent with ARVC (>100 VPCs in 24h; most common age of onset 6-8yo, often asymptomatic). ARVC can occur with or without systolic dysfunction and structural issues. The echo showed a FS of 20% which is concerning for early dysfunction. Follow up is advised. It is always reasonable to rule out other differentials for VPCs (AUS, tick titers, troponin, etc); however, suspicion is low given the signalment of the patient. 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. ARVC carries a HIGHLY variable prognosis, with some dogs able to remain asymptomatic for extended periods of time, and others developing exercise intolerance, syncopal episode, and refractory arrhythmias/sudden death imminently.

History this case is somewhat. Tachycardia was appreciated on exam following the collapse episode; however, we do not have ECG confirmation of ventricular tachycardia during or following the event. The chest radiographs were reportedly concerning for congestion which is difficult to support without significant structural disease or sustained arrhythmias. Now the Holter monitor shows only isolated VPCs, despite not being on antiarrhythmic therapy at this time. Based upon the totality of the findings and no recurrent clinical signs, I would not necessarily institute antiarrhythmic therapy at this juncture. Certainly should the episodes recur in the future, reassessing the ECG and/or Holter may be indicated or potentially simply adding sotalol recommended. I am also not convinced this patient needs to be on continued cardiac supportive therapy, however, the safest approach would be to continue these medications until reassessment in 6 months.



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

SPECIES

Canine

Anesthetic risk is considered moderate. 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).

BREED

Boxer

Monitor at home for collapse, exercise intolerance, and/or lethargy.

SEX

Male Neutered

Plan: Recommend continue Lasix and pimobendan at standard dosages for the short-term (1-2mg/kg PO q12h and 0.3mg/kg PO q12h, respectively). If any recurrence in respiratory signs, repeat chest radiographs with radiologist review. If any recurrent syncope, immediate reevaluation of the heart rate and ECG is recommended with institution of sotalol 1-2 mixed per K by mouth every 12 hours if indicated by the results.

AGE

9 years

If patient does well without clinical issues, a recheck echocardiogram, ecg/holter is recommended in 6 months to reassess need for medications.

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IMAGES



Isolated VPCs throughout

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(Cardiology)

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.

IMAGING PERFORMED BY

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

Straley VA

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