



PATIENT

Olive Anderson

SPECIES

Canine

BREED

Boxer

SEX

Female Spayed

AGE

9 years

WEIGHT

62.8lbs

INTERPRETED BY

Maggie Machen
Lamy, DVM
DACVIM (Cardiology)

IMAGING PERFORMED BY

Pamela Harrigan,
RDCS

HOSPITAL NAME

Anchor Animal
Hospital

REFERRING VET

Dr. Pietsch

INVOICE

24698

DATE

6/9/22

PRESENTING CLINICAL SIGNS

History: Recheck echo. History ARVC with mild LV involvement; history VT and frequent VPCs, improved on sotalol. Olive is currently doing well. The murmur has become louder, now Grade II-III/VI systolic. ProBNP 2197. Current medications: Enalapril 10 mg SID; Sotalol 80 mg BID; Pimobendan 7.5 mg BID. Sedated with gaba/traz and butorphanol for study. Has had several echocardiograms. Pertinent findings of last study performed (12/23/21 - Rima Kharbush, DVM, DACVIM-Cardiology): LA 2.94 cm; LA:Ao 1.43; LV 4.00 cm; normal-mildly dilated LA; normal LV size with globoid apex and mild focal hypokinesis. moderate MR; mild TR 2.04 m/s). ECG findings: NSR with occasional sinus arrhythmia, HR 100-150bpm. Occasional isolated, monomorphic VPCs.

ELECTROCARDIOGRAPHIC FINDINGS *Note: Single lead ECGs are evaluated as a rhythm strip. Morphology/MEA cannot be definitively commented on.

A single lead ECG is available; 25mm/s, 20mm/mV. The average heart rate is 90bpm (range 42-115bpm). The rhythm is sinus in origin, with a p for every QRS complex and vice versa. P and QRS morphologies are positive. A single VPC is identified. No supraventricular ectopic beats, pauses or dysrhythmias observed. ECG diagnosis: Normal sinus rhythm with respiratory variation. Single VPC.

ECHOCARDIOGRAM FINDINGS

2D, m-mode, color flow and Doppler imaging is available.
Left ventricle: The LV is normal in dimension with mild to moderately decreased myocardial function. Mildly increased LV sphericity.
Left atrium: The left atrium is mild to moderately dilated.
Mitral valve: The mitral valve is thickened with no prolapse into the left atrial lumen. Moderate mitral regurgitation. Normal velocity.
Aortic valve/aorta: The aortic valve is normal in morphology and mobility. Normal aortic outflow velocity; laminar flow. No aortic insufficiency.
Right ventricle: Right ventricular is prominent.
Right atrium: RA is mildly enlarged.
Tricuspid valve: The tricuspid valve appears mildly thickened with mild tricuspid regurgitation. Normal velocity.
Pulmonic valve/pulmonary artery: The pulmonic valve is normal in morphology and mobility. No pulmonic insufficiency. Normal RVOT velocity; laminar flow.
Pericardium/other: No pericardial or pleural effusion noted. No obvious cardiac masses.

2-Dimensional Measurements

Ao diam (cm)	1.8
LA diam (cm)	3.2
LA:Ao (Swe)	1.8
IVS thickness (cm)	1.0
LVID diastole (cm)	4.1
PW thickness (cm)	1.0
LVID systole (cm)	3.2
FS (%)	22

Doppler Measurements

PV Vmax (m/s)	0.84
AoV Vmax (m/s)	1.5
MR Vmax (m/s)	5.5
TR Vmax (m/s)	2.6
TR PG (mmHg)	28



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INTERPRETATION OF THE FINDINGS

Mild structural changes persists. Compared to the prior study, the LV and LA are similar in dimension. Mild to moderate systolic dysfunction is noted without obvious progression. Moderate mitral and mild tricuspid regurgitation are similar to previous with potentially slight progression in MR. Regardless, the findings are most consistent with ARVC, given the signalment and history; however, a primary DCM +/- some degree of valve disease is certainly possible. ARVC can have 2 forms; the strictly arrhythmic form with normal cardiac structure/function, or the DCM form with both the arrhythmia and ventricular dilation/dysfunction. The latter is suspected in this case, given the signalment, echo and ECG findings.

While historical VT is of great concern, the included ECG shows a single isolated VPC which is great news. Given these findings, reasonable to continue Sotalol as prescribed. The dose is quite high and the resting heart rate quite low which may suggest a dose change is reasonable; however, not knowing the full history I am unable to make this call.

Even with good control, this patient is at extremely high risk for recurrent VT and sudden death, and this should be expressed to the owner. A holter monitor is recommended, to ensure adequate arrhythmic control.

RECOMMENDATIONS

- Continue Sotalol Enalapril and Pimobendan as prescribed.
- As baseline BP is recommended every 6 months.
- Consider a holter monitor as discussed.
- Consider a Taurine supplement 1000mg PO q12h.
- Omega fatty acid supplementation and mild salt restriction may be of some long-term benefit.
- Mild lifelong activity restriction is advised.
- Monitoring of sleeping breathing rates is recommended to screen for CHF at home.
- Monitor at home for cough, lethargy, inappetance, collapse/fainting episodes, abdominal distention or increase in respiratory rate or effort.

PLAN

- Monitor ECG and/or holter monitor every 6 months.
- Recommend conservative monitoring with a recheck echocardiogram in 6 months, sooner if any development of clinical signs.

IMAGES





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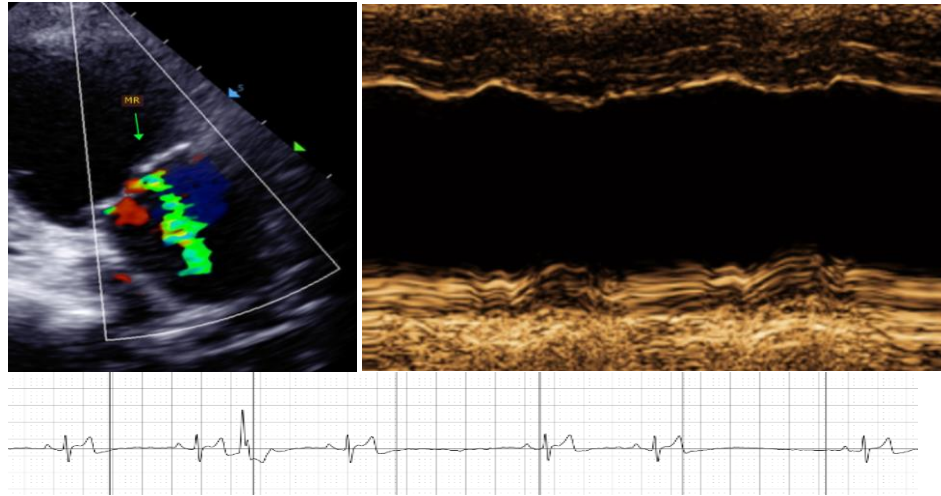
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The information and recommendations provided are based on the images presented by the referring veterinarian. No evaluation can be communicated regarding pathology that was not visible in the image/video clips provided.

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 DACVIM (Cardiology)

Thank you for this referral. This report was generated using transcription software, and minor dictation errors may be present. 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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