

PATIENT	PRESENTING CLINICAL SIGNS
Squirt Cummings	History: Tachycardia; HR 170bpm. BP 144mmHg. Echo results (MD 4/21/22): CVD B1
SPECIES	ELECTROCARDIOGRAPHIC FINDINGS *Note: Single lead ECGs are evaluated as a rhythm strip. Morphology/MEA cannot be definitively commented on.
Canine	A single lead ECG is available; 50mm/s, 10mm/mV. The heart rate is 222bpm with a regular rhythm. No identifiable P waves. The QRS is slightly prolonged. Ventricular premature beats throughout; singles and couplets. Suspect occasional fusion beats. Frequent paroxysmal VT with a HR of 270bpm (non-sustained).
BREED	ECG diagnosis: Supraventricular tachycardia; rule out sinus versus atrial tachycardia. Malignant ventricular arrhythmias with paroxysmal ventricular tachycardia.
Cocker Spaniel	
SEX	INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS
Male Neutered	The ECG confirms malignant ventricular arrhythmias are present in this case, with VPCs and ventricular tachycardia (VT). VT is a malignant arrhythmia generated from abnormal conductive or fibrotic tissue in the ventricles of the heart muscle, and when sustained can lead to symptoms such as lethargy and collapse. VT is considered a highly unstable rhythm, as there is great risk for fibrillation and sudden death. The underlying rhythm is also tachycardic and P waves cannot be visualized. This is unfortunately a limitation of single lead tracings, and a concurrent SVT such as Atrial Tachycardia cannot be ruled out. Given the complexity of the tracing, highly recommend immediate referral for a 6 lead tracing, hospitalization for Lidocaine conversion and anti-arrhythmic therapy in this case. Sotalol is the ideal oral option, however lidocaine should be utilized in the acute phase as below pending 6 lead results. Once the patient is stabilized and sotalol is on board, an extended time 6 lead ECG and/or holter monitor is a reasonable next step to allow monitoring of the rhythm throughout 24 hours of a normal day to ensure good rhythm control.
AGE	VT can develop as a primary issue (such as ARVC), develop secondary to severe structural disease (mild noted on echo report), or be secondary to systemic illness such as neoplasia. All possibilities should be considered in this case given the atypical signalment (AUS, tick titers, troponin, etc.) 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. VT carries a HIGHLY variable prognosis depending on underlying cause, with some dogs able to remain asymptomatic for extended periods of time, and others developing exercise intolerance, syncopal episodes, and refractory arrhythmias/sudden death imminently.
7 years	
WEIGHT	
66 lbs	
INTERPRETED BY	
Maggie Machen Lamy, DVM, DACVIM (Cardiology)	
IMAGING PERFORMED BY	
Sara Hansen, SDEP Clinical Sonographer	
HOSPITAL NAME	Fish oil supplementation is recommended for dogs with arrhythmias (1000mg of omega 3 and 6 once to twice daily as tolerated).
H & H Veterinary Care	Monitor at home for collapse, exercise intolerance, and/or lethargy. Anesthesia is not recommended until good arrhythmic control is achieved. Lifelong mild to moderate activity restriction is advised.
REFERRING VET	PLAN
Dr. Henery	Recommend immediate referral for hospitalization, 6 lead ECG evaluation, Lidocaine conversion and ECG monitoring. If declined (not recommended), oral sotalol should be utilized cautiously, giving a loading dose of 60mg (available in 120mg tabs) followed by 30mg PO q12h. If rhythm is difficult to control, a 6 lead tracing must be performed for further guidance/evaluation. Full systemic evaluation as discussed.
INVOICE	
23827	
DATE	
4/21/22	



PATIENT

Squirt Cummings

Recheck ECG in 1-2 weeks to assess response (goal is significant reduction in ectopy without a significant change in underlying sinus rate). Consider holter at this time if desired.

SPECIES

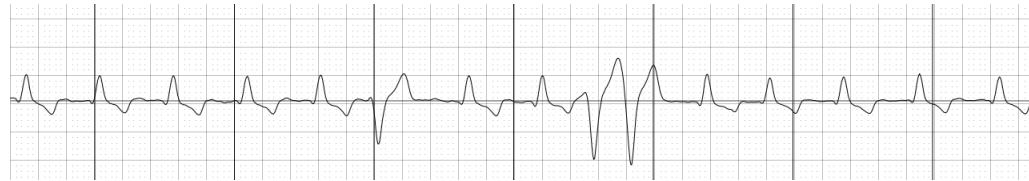
Canine

Recheck ECG and echocardiogram are recommended in 6 months to determine progression/control, sooner if any development of associated clinical signs.

BREED

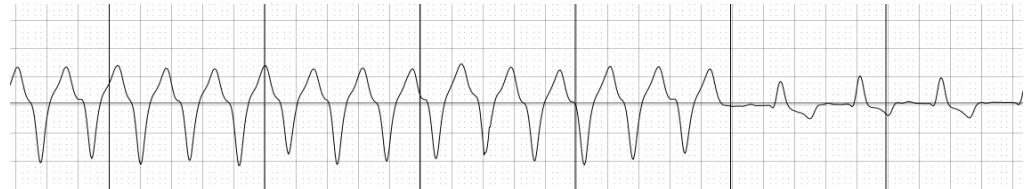
Cocker Spaniel

IMAGES



SEX

Male Neutered



AGE

7 years

WEIGHT

66 lbs

VT

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.

Maggie Machen Lamy, DVM
Diplomate of the American College of Veterinary Internal Medicine (Cardiology)
info@sonopath.com

IMAGING PERFORMED BY

Sara Hansen, SDEP
Clinical Sonographer

HOSPITAL NAME

H & H Veterinary Care

REFERRING VET

Dr. Henery

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