


**PRESENTING CLINICAL SIGNS**

History: Presented for collapse episodes that usually happen during exercise, but can occur intermittently at rest. Grade II/VI left-sided murmur.

**DATE**

12/13/21

**ELECTROCARDIOGRAPHIC FINDINGS**

A single lead ECG is submitted for review.

**PERFORMED BY:**

HR: 120-300 bpm

Rhythm: Sinus with VPCs and paroxysm of ventricular tachycardia

Jenna Walsh, CVT

**INTERPRETED BY**

The underlying rhythm is sinus in origin. All sinus complex amplitudes and intervals are within normal limits. There are frequent monomorphic VPCs present, including multiple ventricular couplets and paroxysms of ventricular tachycardia approaching 300 bpm. No atrial ectopy or conduction blocks are seen.

 Keith Blass, DVM,  
 MS, DACVIM  
 (Cardiology)

**ASSESSMENT/RECOMMENDATIONS**

Ventricular premature complexes (VPCs)/Ventricular tachycardia

**PATIENT**

Winston's ECG demonstrates a severe arrhythmia, as he has frequent ventricular ectopy with multiple paroxysms of rapid ventricular tachycardia. Given this, Winston's arrhythmia is very likely the cause of his collapsing episodes, and its severity puts him at risk for the development of sudden cardiac death.

Winston Joyner

**SPECIES**

Given Winston's breed, it's very likely that his arrhythmia has developed secondary to the presence of arrhythmogenic right ventricular cardiomyopathy (ARVC), though a different cause, such as myocardial dysfunction, drug/toxin exposure, severe electrolyte abnormalities, intra-abdominal disease, and infectious/inflammatory disease cannot be definitively ruled out.

Canine

**BREED**

If Winston experiences sustained ventricular tachycardia while in the hospital, IV lidocaine (2 mg/kg slow IV) would be warranted. As for maintenance therapy, in the absence of relevant myocardial dysfunction or cardiomegaly, sotalol (80 mg BID) would be warranted, while a safer alternative in the presence of relevant structural heart disease would be mexiletine (200 mg TID with food). Severe exercise restriction is recommended, as exercise can worsen Winston's arrhythmia and increase the likelihood of ventricular fibrillation developing.

Boxer

**SEX**

A recheck ECG is recommended in 1 week.

MN

**AGE**

11 y

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.

**WEIGHT**

85 lb

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**

South Willamette VC

 Keith Blass, DVM, MS, DACVIM (Cardiology)  
 KeithBlass@gmail.com  
 631-804-5754

**REFERRING VET**

Dr. Willaman



**DATE**

12/13/21

**PERFORMED BY:**

Jenna Walsh, CVT

**INTERPRETED BY**

Keith Blass, DVM,  
MS, DACVIM  
(Cardiology)

**PATIENT**

Winston Joyner

**SPECIES**

Canine

**BREED**

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