



**PATIENT PRESENTING CLINICAL SIGNS**

Bruno Barros

History: Collapsed at home. Arrived to ER with a ventricular arrhythmia. Sotalol instituted and has done well since. Echo (EL 8-1-23): NSF; bradyarrhythmia noted.

**SPECIES ELECTROCARDIOGRAPHIC FINDINGS** \*Note: Single lead ECGs are evaluated as a rhythm strip.

Canine

Morphology/MEA cannot be definitively commented on.

**BREED**

Boxer

Multiple ECGs labeled 8-4-23 submitted. Wandering baseline throughout. A single lead ECG is available; 50mm/s, 10mm/mV. The average heart rate is 180bpm (range 136-230bpm). P waves cannot be visualized, likely due to device insensitivity. All QRS complexes are similar in appearance consistent with a supraventricular origin. Intermittent tachycardia (rule out atrial tach v sinus origin). No ventricular beats or other dysrhythmias observed. ECG diagnosis: Supraventricular rhythm.

**SEX**

**CARDIAC CHART**

MN

**AGE**

8y

**WEIGHT**

77lbs

**INTERPRETED BY**

Maggie Machen Lamy, DVM, DACVIM (Cardiology)

**IMAGING PERFORMED BY**

JDAH

**HOSPITAL NAME**

JD Animal Hospital

CANINE CARDIAC PARAMETERS	MR VMAX (m/s)	TR VMAX (m/s)	LA/AO (Boon method)	LA/AO (Heart Base; Swe)	FS (%)	EF (%)	EPSS (cm)
NORMAL PARAMETER	4.5-5.5	<2.7	1.3	<1.6	28-40	40-100	<0.6
PATIENT			NM				NM
CANINE CARDIAC PARAMETERS	HR (BPM)	AV VMAX (m/s)	PV MAX (m/s)	BODY WEIGHT (kg)	LA 2D short axis Base view (cm)	LVIDd Avg; 2D and m-mode short axis (cm)	LVIDs Avg; 2D and m-mode short axis (cm)
NORMAL PARAMETER	50-100	0.7-1.7	0.7-1.6	BELOW	BELOW	BELOW	BELOW
PATIENT							
*Normal chamber parameters expressed as a mean value (SD)				3	1.27 (5.3)	2.46 (2.46)	1.36 (5.5)
<b>BODY WEIGHT DEPENDENT PARAMETERS</b> <i>*Note: All measurements based upon multi-modal images and methods. An average value is reported.</i>  Adapted from June Boon, Veterinary Echocardiography, 1998 Rishniw M and Hollis NE, J Vet Intern Med 2000; 14:429-435 Hansson et al, Vet Rad and Ultrasound 2002 Bonagura et al. Echocardiography: principles of interpretation, Vet Clin North Am 15:1177, 1995				5	1.40 (4.5)	2.74 (5.2)	1.60 (4.7)
				10	1.50 (3.8)	3.27 (3.5)	2.06 (3.1)
				15	1.83 (2.0)	3.71 (2.4)	2.43 (2.1)
				20	2.02 (1.9)	4.14 (2.2)	2.80 (2.0)
				25	2.18 (2.4)	4.48 (2.9)	3.10 (2.5)
				30	2.33 (3.3)	4.83 (3.9)	3.39 (3.4)
				35	2.48 (4.3)	5.17 (5.0)	3.69 (4.5)
				40	2.62 (5.2)	5.48 (6.1)	3.96 (5.4)
				50	2.88 (7.1)	6.07 (8.3)	4.46 (7.4)

**INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS**

What can be said from these tracings is no persistent ventricular arrhythmias are present. What cannot be deciphered however, is if the patient is still experiencing supraventricular arrhythmias (APCs/brief SVT) or if this is simply a sinus rhythm with sinus tachycardia. P waves cannot be visualized and there is significant wandering baseline making extensive interpretation difficult (which unfortunately is a limitation of a single lead tracing). My assumption is that P waves are present just unable to be visualized due to device insensitivity. This patient is in need of a 6 lead tracing with a Cardiologist evaluation (ideally with the ER VT strips available for comparison as well) before recommendations can be made. A holter should also be considered.

**REFERRING VET**

Dr. Montalvo

**INVOICE**

32209

**DATE**

8/8/23



**PATIENT**

Bruno Barros

If the patient has not collapsed since starting Sotalol then this is certainly a good sign; however, the heart rate remains elevated here (which is atypical of patients on adequate Sotalol). Additionally the echo interpretation mentioned a bradyarrhythmia was present, which is difficult to decipher given the history.

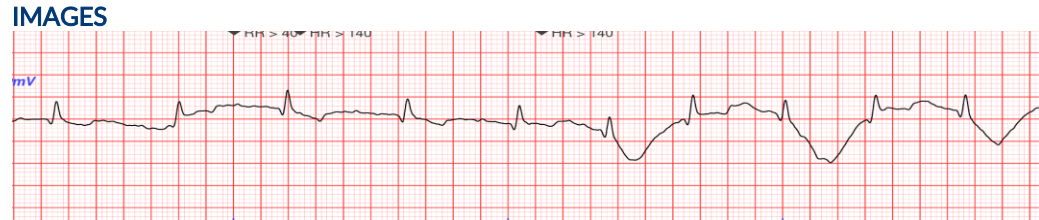
**SPECIES**

Canine

Plan: Consider sotalol at standard dosing (1-2mg/kg PO q12 h). HIGHLY recommend referral for a 6 lead tracing and Cardiologist evaluation/interpretation.

**BREED**

Boxer

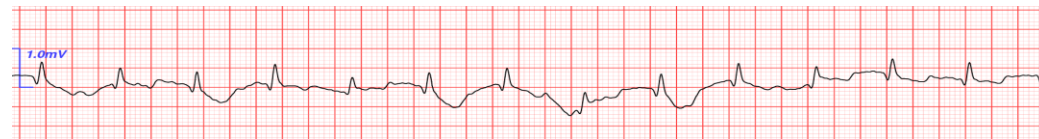


**SEX**

MN

**AGE**

8y



**WEIGHT**

77lbs

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.

**IMAGING PERFORMED BY**

JDAH

Maggie Machen Lamy, DVM  
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