



## PATIENT

Desmond Windebank

## SPECIES

Canine

## BREED

Chihuahua Mix

## SEX

MN

## AGE

8 y

## WEIGHT

5 kgs

## INTERPRETED BY

Maggie Machen  
Lamy, DVM, DACVIM  
(Cardiology)

## IMAGING PERFORMED BY

Dr. Jacquie Pankatz

## HOSPITAL NAME

Mountain Vista VH

## REFERRING VET

Dr. Pankatz

## INVOICE

27740a

## DATE

11/30/22

## PRESENTING CLINICAL SIGNS

History: While patient was under general anesthesia for a dental procedure, heart rate and blood pressure started to drop. No obvious arrhythmias were noted. Anesthesia was stopped, glycopyrrolate and antipamezole given and the patient recovered uneventfully and has been fine since. ECG performed the following day with no sedatives on board. No history of a heart murmur or clinical signs of heart disease

Abnormal PE/Chem/CBC/UA Results: Blood profile unremarkable Anesthesia given for dental: Premed: Medetomidine 10 mcg/kg + Methadone 0.5 mg/kg IV induction: ketamine/diazepam Isoflurane

**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, 10mm/mV. The average heart rate is 130bpm (range 115-158bpm). Heart rate variation is appreciated; however, no obvious significant pauses or premature beats are appreciated. The rhythm is sinus in origin, with a P for every QRS and vice versa. No premature beats or other dysrhythmias observed.

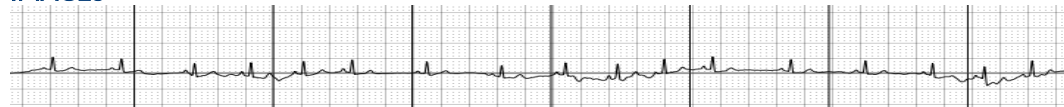
ECG diagnosis: Suspect respiratory sinus arrhythmia due to high vagal tone.

## INTERPRETATION OF THE FINDINGS & FURTHER RECOMMENDATIONS

The ECG is most consistent with a profound **sinus arrhythmia** with suspected respiratory variation. This is typically a normal finding secondary to high vagal tone or can be inappropriate and reflect sinus node dysfunction. Consider assessing response to light exercise/stress ((does the heart rate/rhythm have a normal response?). If there is any question, an atropine challenge can be administered (0.04mg/kg IV or IM). If the rate does not stimulate appropriately (should develop a regular sinus tachycardia and maintain for 10-15 minutes), consider a holter monitor or referral as the next step in evaluation. Suspicion is low in this case as no significant bradycardia appreciated.

Assuming a RSA is confirmed, there is no obvious correlation to bradycardia during the procedure, as the HR should theoretically respond to vagolytics. Consider re-attempt the procedure; however, pre-medicating with a vagolytic is suggested. If bradycardia again develops, consider referral to a multispecialty center with an Anesthesiologist as the gold standard approach.

## IMAGES



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.

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.

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