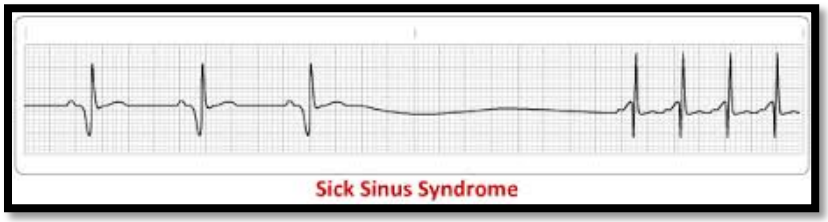
ROCKY MOUNTAIN
VETERINARY CARDIOLOGY, P.C.

Sick Sinus Syndrome



Your pet has been diagnosed with Sick Sinus Syndrome (SSS). Sick Sinus Syndrome is a combination of a variety of electrical abnormalities that typically result in a heart rate that is too slow (sinus pauses, wandering pacemaker, atrioventricular block). Miniature Schnauzers and West Highland Terriers are the most common breeds for this arrhythmia but it is certainly not limited to these two breeds.
Your pet may experience exercise intolerance, weakness, or collapse. These symptoms typically happen during bradycardia, sinus arrest (long pauses in between beats), or block.
Diagnosing Sick Sinus Syndrome:
Electrocardiography (ECG) is characterized by episodes of marked bradycardia (slow heart rate) with sinus arrest or block. Occasionally a pet will have a component of the syndrome that causes the heart rate to get too fast (brady-tachy syndrome).
24 Hour Holder Monitor - Your pet will be fitted with the Holter monitor (mobile ECG) at our clinic and sent home with the device while it records your pets electrical rhythm over 24 hours. The Holter monitor will allow us to see how often your pet is having this arrhythmia. This helps us diagnose mild cases of SSS that are not immediately apparent during the ECG exam in hospital.

Treatment for Sick Sinus Syndrome is to place a permanent pacemaker. This is a surgical procedure that requires guidance with fluoroscopy (continuous real time radiography). The jugular vein (large vein in the neck) is accessed surgically and the pacemaker lead is implanted, most commonly in the right ventricle. The lead is attached to the generator (battery power for the pacemaker system) and the generator is fixed under the skin in the neck region. The pacemaker can be programmed externally using an interrogator, a device that communicated with the generator. This allows us to adjust the heart rate and check battery life from outside the patient using a wand that sits on the skin over the top of the generator. Every 6 months post-implantation, the pacemaker needs to be rechecked to make sure it is functioning properly and the battery life remains adequate.

If pacemaker implantation is not an option, medical management can be attempted but it is often not as successful as pacemaker implantation.