

Sotalol

Sotalol is an antiarrhythmic medication. That is, it is used to treat certain types of cardiac *arrhythmias*, or abnormalities in the electrical activity of the heart. It does this by blocking the effects of adrenaline on the heart (class II antiarrhythmic or “beta blocker” activity) and by blocking the exit of potassium from heart muscle cells (class III antiarrhythmic activity). Please refer to the “Arrhythmias” information sheet for more details about the diagnosis and treatment of cardiac rhythm disturbances.

As is true for any antiarrhythmic medication, an *electrocardiogram (EKG)* must be performed before and several days after initiation of therapy with sotalol. This is a recording of the heart’s electrical activity, and is used to document and characterize the type and severity of the arrhythmia present (first EKG), and later to assess its response to treatment (second EKG). For the kind of arrhythmia typically treated with sotalol, each of these should take the form of a 24-hour ambulatory EKG (Holter monitor) in order to ensure an accurate representation of the frequency and severity of the arrhythmia. Medical therapy is initiated and later modified as necessary based on the results. This may include a change in the dose of sotalol, addition of a second antiarrhythmic agent, or occasionally discontinuation of sotalol altogether.

Any *antiarrhythmic* agent may rarely have a seemingly paradoxical *proarrhythmic* effect, whereby the arrhythmia worsens instead of improving as expected. Sotalol, in particular, also causes the normal heart rate to become somewhat slower as a result of its beta blocking activity. Side effects may occur if either of the above leads to a significant drop in blood pressure. In this case, symptoms may include loss of appetite, lethargy, weakness, or fainting. Signs of congestive heart failure are unlikely but can occur, and include the above as well as intolerance to exercise, coughing (in dogs), rapid or labored breathing, or abdominal distension. Unfortunately, arrhythmias can be fatal, and sudden death may occur even with antiarrhythmic therapy.

Sotalol should **never** be discontinued suddenly due to the potential for severe “rebound” increases in heart rate and blood pressure. Any change in its administration should be discussed first with a doctor. If any of the above symptoms are noted, or if you have any questions or concerns, please call your veterinarian or Dr. Marshall at Veterinary Specialty Services immediately to discuss an appropriate plan. Problems that are caught early are more easily corrected and less likely to require a visit to the hospital.