



EAST COAST VETERINARY CARDIOLOGY

Digoxin

Drug Classification & Information

Digoxin is classified as a cardiac glycoside – it was originally sourced from the Foxglove plant. It can increase the amount of calcium within the cardiac cells which can improve the strength of heart contraction. It can also slow conduction through the heart so is useful for certain types of arrhythmias. It is generally best given with food.

Indications for Use

Digoxin was historically used for treatment of dilated cardiomyopathy by improving strength of cardiac contraction. Pimobendan has replaced this digoxin for this purpose. In veterinary medicine, digoxin is primarily used in combination with diltiazem for rate control of atrial fibrillation. It may also be used for certain types of supraventricular tachycardias.

Potential Drug Interactions

Amiodarone, carvedilol, ACE inhibitors, spironolactone, HCTZ and furosemide can increase digoxin levels – therefore monitor for signs of toxicity when combination therapy is used. Caution with other anti-arrhythmics such as beta and calcium channel blockers as bradycardias may be noted.

Drug Side Effects

Digoxin has a narrow therapeutic index and the risk for toxicity may be high. Side effects are primarily gastrointestinal with anorexia, vomiting and diarrhea noted. These signs resolve with discontinuation of therapy. There may be increased risk for toxicity in dogs with the MDR1 defect (herding breeds). Can have a variety of pro-arrhythmic effects (heart block, ventricular arrhythmias).

Therapeutic Monitoring

As renal disease and electrolytes can affect digoxin levels in the body, routine chemistry panels are recommended when taking digoxin (every 4-6 months). If there is concern for toxicity, a digoxin level can be performed (8 hours post pill). Routine electrocardiograms (ECGs) to follow treatment efficacy.

Dosage Forms

Human: 125 microgram & 250 microgram tablets

