



# EAST COAST VETERINARY CARDIOLOGY

## Mexiletine

### **Drug Classification & Information**

Mexiletine is an oral anti-arrhythmic classified as a sodium channel blocker (class I anti-arrhythmic). It has similar effects to lidocaine (an injectable anti-arrhythmic medication). It has a relatively short half-life which requires more frequent daily dosing (generally prescribed every 8 hours). It is recommended to give this medication with food.

### **Indications for Use**

Mexiletine is indicated for the treatment of ventricular arrhythmias.

### **Potential Drug Interactions**

Amiodarone may increase mexiletine levels. Antacids may slow absorption and metoclopramide may increase absorption. Phenobarbital may increase metabolism of mexiletine. Sotalol may increase mexiletine levels in the body. Theophylline may delay metabolism leading to risk of mexiletine toxicity.

### **Drug Side Effects**

The most common side effect noted is gastro-intestinal upset – anorexia, vomiting and diarrhea. Giving this medication with food can reduce these side effects. May also result in neurologic side effects including trembling, ataxia (incoordination), lethargy. Can result in bradycardia – caution in patients with AV block or other bradycardias. Use with caution in dogs with the MDR1 (homozygous) gene mutation as they may be susceptible to mexiletine toxicity.

### **Therapeutic Monitoring**

Regular electrocardiogram (ECG) and Holter monitoring is used to assess treatment efficacy.

### **Dosage Forms**

Human: 150, 200, 250 mg capsules. Generally given three times daily (every 8 hours – approximately, if there is variability of 1-2 hours with the dosing schedule this is unlikely to result in adverse effects).

