VHA Pharmacy Benefits Management-Strategic Healthcare Group and Medical Advisory Panel Amiodarone Monitoring

Due to the number of reports to the FDA of serious adverse events with amiodarone, it is recommended that all patients on amiodarone be reviewed for appropriate monitoring. This form has been developed to assure that a mechanism is in place for documenting the monitoring requirements.

The information on this form is a compilation of recommendations and may be modified according to clinical practice at the facility. If there already is an adequate monitoring system in place at the facility, it is not necessary to implement this form.

Examination	Baseline	3 months	6 months	12 months	If Symptoms
Pulmonary Function ^a					
Chest X-ray ^b					
Thyroid Panef					
Liver Panel		_			
ECG					
Eye Exam					
CBC					
Chem-7					
Clinical Evaluation					

^a Baseline only if underlying pulmonary disease suspected

^c Some recommend monitoring every 6 months, others periodically

Potential Drug Interactions	Date Started ^a	Date lab f/u:	Date lab f/u:	Date lab f/u:
Warfarin		INR:	INR:	INR:
Digoxin		Digoxin:	Digoxin:	Digoxin:
Antiarrhythmic:		Level:	Level:	Level:
Phenytoin		PHT:	PHT:	PHT:
Cyclosporine or Tacrolimus		Level:	Level:	Level:

^a Table may be used to document appropriate follow-up when amiodarone or interacting medication initiated

Medications Known to Interact with Amiodarone a	Interaction	Recommendations	
Warfarin	↑ PT and INR (usually begins within 1 week, stabilizing after 1 month) due to inhibition of warfarin metabolism; ↑ bleeding risk	Consider ↓ warfarin dose by 33-50%; monitor INR weekly for 4 weeks; titrate to goal INR	
Digoxin	↑ digoxin concentrations (usually within 1-7 days, progressing over several weeks or months) by ↓ renal and nonrenal clearance; may result in toxicity	Consider	
Antiarrhythmic agents (quinidine, procainamide, flecainide)	↑ antiarrhythmic blood levels (within 5-7 days, taking several weeks for maximum effect) due to ↓ hepatic clearance; may prolong impulse conduction resulting in arrhythmias	Monitor ECG intervals; ↓ dose of antiarrhythmic 33-50% (20-33% for procainamide) several days after start of amiodarone or if already on amiodarone, initial dose of antiarrhythmic should be ↓ by 50% of the usual initial dose; or monitor serum concentrations and adjust dose accordingly	
Phenytoin	↑ concentrations of phenytoin (usually within 3-4 weeks) by inhibition of hepatic metabolism; may result in toxicity	Monitor phenytoin serum concentrations at 2-4 weeks and adjust dose accordingly; amiodarone levels may ↓	
Cyclosporine, Tacrolimus	Clearance ↓ by 50%; may result in toxicity (renal dysfunction)	Monitor plasma concentrations frequently and adjust dose accordingly	
b -adrenergic blockers, Calcium antagonists (diltiazem, verapamil)	Possible potentiation of bradycardia, sinus arrest, AV block	Observe patient carefully for signs of cardiac toxicity	

^a Clinically significant interactions listed; for additional drug interactions, refer to references below.

References:

- 1. Hansten PD, Horn JR. Drug interactions analysis and management. Vancouver: Applied Therapeutics; 1998
- 2. Singh BN. Amiodarone: The expanding antiarrhythmic role and how to follow a patient on chronic therapy. Clin Cardiol 1997;20:608-18.
- 3. Pollack PT. Clinical organ toxicity of antiarrhythmic compounds: ocular and pulmonary manifestations. Am J Cardiol 1999;84:37R-45R.
- 4. Cordarone® (amiodarone) product information. Wyeth Laboratories, Inc; 1998.
- Pacerone[®] (amiodarone) product information. Upsher-Smith Laboratories, Inc; 1998.

^b Others have recommend monitoring every 3 to 6 months