

Lanoxin (digoxin)

Indications: Atrial Fibrillation/Flutter, CHF

Dosing:

Loading Dose (IV): 10-15mcg/kg in 3 divided doses q 6-8 hours (50% with the first dose, then 25% of the total for the 2nd and 3rd doses)

Loading Dose (PO): 12.5-18.75mcg/kg in 3 divided doses q 6-8 hours (50% with the first dose, then 25% of the total for the 2nd and 3rd doses)

Maintenance Dose (PO): 0.125 mg - 0.25 mg daily

***NOTE: PO indicates tablets or elixir, which have 80% bioavailability. IV has 100% bioavailability as do capsules. Therefore, if capsules were used, you would calculate based on IV dosing.

Adverse effects: Bradycardia, Agitation, Hallucinations, Blur Vision, Nausea/Vomiting

Drug interactions:

1. Quinidine and verapamil increase digoxin concentrations via P-glycoprotein.
2. Potassium: Hyperkalaemia can induce digoxin toxicity at therapeutic levels.
3. Calcium: Serious arrhythmias can occur especially when receiving IV calcium rapidly (e.g. Calcium gluconate boluses)
4. The following medications may increase digoxin levels by inhibiting its clearance (amiodarone, felodipine, diltiazem, propafenone, quinidine, quinine, and verapamil)

Contraindications: AV block, ventricular fibrillation, Renal Disease (use cautiously)

Nursing considerations:

1. Monitor Apical HR, BP, ECG
2. Monitor electrolytes (esp. potassium and calcium)
3. Use with caution in MI, Pulmonary Disease, Hypothyroidism
4. Check serum Digoxin levels (normal 0.5 - 2 ng/ml)
5. Observe for digoxin toxicity
 - A. Sagging S-T segment (downward sloping)
 - B. Prolonged PR interval (> 0.2 second)
 - C. PVC's
 - D. Heart Block
 - E. Hyperkalaemia
 - F. Hypercalcemia