

ACTIVE LEARNING TEMPLATE: Medication

STUDENT NAME _____

MEDICATION _____ REVIEW MODULE CHAPTER _____

CATEGORY CLASS _____

PURPOSE OF MEDICATION

Expected Pharmacological Action

Block stimulation of beta 1-adrenergic receptors. Does not usually affect beta2-adrenergic receptor sites.

Therapeutic Use

Decreased BP and Heart rate.
Decreased frequency of attack of angina pectoris
Decreased rate of cardiovascular mortality and hospitalization in patients with heart failure.

Complications

Bradycardia, HF, Pulmonary Edema, hypotension, peripheral vasoconstriction, rash, blurred vision, stuffy nose, hyperglycemia, hypoglycemia, constipation, diarrhea, drug induced hepatitis, dry mouth, flatulence, gastric pain, heartburn, increased liver enzymes, nausea, vomiting, erectile dysfunction, decreased libido, urinary frequency, arthralgia, back pain, joint pain, fatigue, weakness, anxiety, depression, dizziness, insomnia, memory loss, mental status change, nervousness, nightmares, bronchospasm, wheezing, drug induced lupus syndrome.

Contraindications/Precautions

Contraindicated: uncompensated HF, Pulmonary Edema, Cardiogenic shock, bradycardia, heart block, or sick sinus syndrome (in absence of pacemaker)

Precaution: Renal impairment, hepatic impairment, pulmonary disease (including asthma), DM (may mask the signs of hypoglycemia, Thyrotoxicosis, patients with history of severe allergic reactions, untreated pheochromocytoma. OB: use only if maternal benefits justifies risk to fetus (crosses placenta barrier), Lactation: only if potential maternal benefit justifies risk to infant. Pedi: safety and effectiveness not established. Geri: older adults may have increased sensitivity recommended lower starting dose.

Interactions

Gen anesthesia, iv phenytoin and verapamil may cause increased myocardial depression. increased risk of bradycardia when used with dig, verapamil, cardizem, or clonidine. Increased hypotension may occur with other antihypertensives, ingestion with etoh, or nitrates. Concurrent admin of thyroid admin may decrease effectiveness. May alter effectiveness of insulins or oral hypoglycemic agents. May decrease the effectiveness of theophylline. May decrease the beneficial of beta 1 cardiovascular effects of dopamine or dobutamine. Use cautiously within 14 days of MAO inhibitor therapy

Evaluation of Medication Effectiveness

Decrease in BP
Reduction in frequency of anginal attacks
Increase in activity tolerance.
Prevention of MI

Medication Administration

Adults: PO- HTN 25-100 mg/day as a single dose or 2 divided doses. May increase every 7 days as needed up to 450mg/day (immediate release) or 400mg/day (extended release)

MI- 25-50 mg 15 min after last iv dose, every 6 hours for 48 hours, then 100mg twice daily. HF- 12.5-25mg daily extended release can be doubled every 2 weeks up to 200mg daily. Migraine prevention- 50-100mg 2-4 times daily

IV: for MI 5mg every 2 mins for 3 doses followed by oral dosing.

Children PO: Hypertension- 1mg/kg once daily extended release may be titrated as needed not to exceed 50mg/day.

Nursing Interventions

Monitor BP, EKG, and pulse frequency during dose adjustments.

Monitor for compliance,

Monitor intake and output ratios and daily weights.

Assess routinely for s/s of heart failure.

Assess angina frequency and characteristics of

angina attacks during therapy.

Monitor BUN, KCL, triglycerides, and uric acid levels, blood glucose levels, AST, ALT,

Client Education

Take medication as directed.

Teach patient to check bp and pulse daily and report any changes.

May cause drowsiness, avoid driving until effect is known.

Change positions slowly to minimize orthostatic hypotension.

May increase sensitivity to cold.

Notify provider of all OTC/RX meds being taken.

Monitor blood sugar levels in DM patients.

Inform provider of med regimen prior to any surgical procedures.

Notify provider if planning pregnancy or become pregnant