Tenormin (atenolol) - Drug Summary

Almatica Pharma, Inc.

Related Drug Information

Tenormin (atenolol)

BOXED WARNING

Avoid abrupt discontinuation of therapy in patients w/ coronary artery disease (CAD). Severe exacerbation of angina and occurrence of MI and ventricular arrhythmias reported in angina patients following abrupt discontinuation w/ β-blockers. If planning to d/c therapy, carefully observe and advise to limit physical activity. Promptly reinstitute therapy, at least temporarily, if angina worsens or acute coronary insufficiency develops. CAD may be unrecognized; may be prudent to avoid abrupt discontinuation in patients only treated for HTN.

THERAPEUTIC CLASS

Selective beta$_1$ blocker

DEA CLASS

RX

ADULT DOSAGE & INDICATIONS

Hypertension

Initial: 50mg qd, either alone or w/ diuretic therapy
Titrate: May increase to 100mg qd after 1-2 weeks
Max: 100mg qd

Angina Pectoris

Long-term Management:
Initial: 50mg qd
Titrate: May increase to 100mg qd after 1 week
Max: 200mg qd

Acute Myocardial Infarction

Management of hemodynamically stable patients w/ definite/suspected acute MI to reduce cardiovascular mortality

Usual: Following IV dose, 50mg 10 min after IV dose followed by 50mg 12 hrs later, then 100mg qd or 50mg bid for 6-9 days or until discharge from the hospital

Atenolol is an additional treatment to standard coronary unit therapy

DOSING CONSIDERATIONS

Renal Impairment
Max Dose for CrCl 15-35mL/min: 50mg/day
Max Dose for CrCl <15mL/min: 25mg/day

Hemodialysis:
25mg or 50mg after each dialysis

HTN:

Initial: May require a lower dose of 25mg qd

Elderly
HTN:
Initial: May require a lower dose of 25mg qd

ADMINISTRATION

Oral route

HOW SUPPLIED

Tab: 25mg, 50mg*, 100mg *scored

CONTRAINDICATIONS

Sinus bradycardia, >1st-degree heart block, cardiogenic shock, overt cardiac failure.

WARNINGS/PRECAUTIONS

May cause/precipitate heart failure (HF); d/c if cardiac failure continues despite adequate treatment. Avoid w/ bronchospastic disease; may use w/ caution if unresponsive to/intolerant of other antihypertensive treatment. Chronically administered therapy should not be routinely withdrawn prior to major surgery; however, may augment risks of general anesthesia and surgical procedures. Caution in diabetic patients; may mask tachycardia occurring w/ hypoglycemia. May mask clinical signs of hyperthyroidism and may precipitate thyroid storm w/ abrupt discontinuation. Avoid w/ untreated pheochromocytoma. May cause fetal harm. May aggravate peripheral arterial circulatory disorders.

ADVERSE REACTIONS

Tiredness, dizziness, cold extremities, depression, fatigue, dyspnea, postural hypotension, bradycardia, leg pain, lightheadedness, lethargy, diarrhea, nausea, wheeziness.

DRUG INTERACTIONS

Additive effects w/ catecholamine-depleting drugs (eg, reserpine), calcium channel blockers, and amiodarone. May cause severe bradycardia, asystole, and HF w/ disopyramide. Bradycardia and heart block can occur and left ventricular end diastolic pressure can rise w/ verapamil or diltiazem. Exacerbates rebound HTN w/ clonidine withdrawal; withdraw β-blocker therapy several days before gradual withdrawal of clonidine or delay introduction of β-blockers for several days after stopping clonidine. Prostaglandin synthase inhibitors (eg, indomethacin) may decrease hypotensive effects. May be unresponsive to usual doses of epinephrine. Concomitant use w/ digitalis glycosides may increase risk of bradycardia.

PREGNANCY AND LACTATION

Category D, caution in nursing.

MECHANISM OF ACTION

Cardioselective β-adrenoreceptor-blocking agent; not established. Suspected to competitively antagonize catecholamines at peripheral (especially cardiac) adrenergic neuron sites, leading to decreased cardiac output; a central effect leading to reduced sympathetic outflow to the periphery and suppression of renin activity.

PHARMACOKINETICS

Absorption: Rapid, incomplete; T_{max}=2-4 hrs. **Distribution:** Plasma protein binding (6-16%); found in breast milk; crosses the placenta. **Elimination:** Urine (approx 50%), feces (unchanged); $T_{1/2}$=approx 6-7 hrs.

ASSESSMENT

Assess for history of hypersensitivity, bradycardia, cardiogenic shock, >1st-degree heart block, overt cardiac failure, acute MI, renal dysfunction, bronchospastic disease, conduction abnormalities, left ventricular dysfunction, peripheral arterial circulatory disorders, diabetes mellitus, hyperthyroidism, pheochromocytoma, pregnancy/nursing status, and for possible drug interactions.

MONITORING

Monitor for signs/symptoms of cardiac failure, for masking of hyperthyroidism/hypoglycemia, and for other adverse reactions. Monitor renal function, pulse, and BP. Following abrupt discontinuation, monitor for thyroid storm and in patients w/ angina, monitor for severe exacerbation of angina, MI, and ventricular arrhythmias.

PATIENT COUNSELING

Instruct to take as prescribed. Advise not to interrupt or d/c therapy w/o first consulting physician. Inform that drug may cause fetal harm; instruct to notify physician if pregnant or if considering becoming pregnant.

STORAGE

20-25°C (68-77°F).

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