METHYLDOPA:

Class: Alpha2-Adrenergic Agonist

Indications: Management of moderate-to-severe hypertension

Available dosage form in the hospital: 250MG TAB

Trade Names:

Dosage:

Hypertension:
- Oral: Initial: 250 mg 2-3 times/day; increase every 2 days as needed (maximum dose: 3 g/day); usual dose range (JNC 7): 250-1000 mg/day in 2 divided doses. Note: When administered with other antihypertensives other than thiazide diuretics, limit initial daily dose of methyldopa to 500 mg/day.
- I.V.: 250-1000 mg every 6-8 hours; maximum: 1 g every 6 hours.

Geriatric
Refer to adult dosing. Initiate at the lower end of the dosage range.

Renal Impairment:
No dosage adjustment provided in manufacturer’s labeling; however, the following adjustments have been recommended (Aronoff, 2007):
- \(\text{Cl}_{cr} \geq 50 \text{ mL/minute} \): Administer every 8 hours.
- \(\text{Cl}_{cr} = 10-50 \text{ mL/minute} \): Administer every 8-12 hours.
- \(\text{Cl}_{cr} < 10 \text{ mL/minute} \): Administer every 12-24 hours.

- Intermittent hemodialysis (administer after hemodialysis on dialysis days): Moderately dialyzable (up to 60% with a 6-hour session) (Yeh, 1970).
- Peritoneal dialysis (PD): Administer every 12-24 hours.

- Continuous renal replacement therapy (CRRT): Administer every 8-12 hours. Note: Use of antihypertensives in patients requiring CRRT is generally not recommended since CRRT is typically employed when patient cannot tolerate intermittent hemodialysis due to hypotension.

Hepatic Impairment:
Use is contraindicated in patients with active hepatic disease.

Common side effect:
Cardiovascular: Angina pectoris aggravation, bradycardia, carotid sinus hypersensitivity prolonged, heart failure, myocarditis, orthostatic hypotension, paradoxical pressor response (I.V. use), pericarditis, peripheral edema, symptoms of cerebrovascular insufficiency, vasculitis

Central nervous system: Bell’s palsy, dizziness, drug fever, headache, lightheadedness, mental acuity decreased, mental depression, nightmares, parkinsonism, sedation

Dermatologic: Rash, toxic epidermal necrolysis

Endocrine & metabolic: Amenorrhea, breast enlargement, gynecomastia, hyperprolactinemia, lactation, libido decreased

Gastrointestinal: Abdominal distension, colitis, constipation, diarrhea, flatulence, nausea, pancreatitis, sialadenitis, sore or “black” tongue, vomiting, weight gain, xerostomia

Genitourinary: Impotence

Hematologic: Bone marrow suppression, eosinophilia, granulocytopenia, hemolytic anemia; positive tests for ANA, LE cells, rheumatoid factor, Coombs test (positive); leukopenia, thrombocytopenia

Hepatic: Abnormal LFTs, liver disorders (hepatitis), jaundice

Neuromuscular & skeletal: Arthralgia, choreoathetosis, myalgia, paresthesias, weakness

Renal: BUN increased

Respiratory: Nasal congestion

Miscellaneous: SLE-like syndrome

Pregnancy Risk Factor: B/C (injectable)