amiloride (a-mill-oh-ride)

Diuretics, potassium-sparing diuretics

Class: Potassium-sparing diuretics

Pregnancy Category B

Indications

Counteracts potassium loss caused by other diuretics. Used with other agents to treat edema or hypertension.

Action

Blocks sodium reabsorption in the kidneys, saving potassium and hydrogen ions.

Therapeutic Effects: Weak diuretic and antihypertensive response when compared with other diuretics. Conservation of potassium.

Pharmacokinetics

Absorption: 30–90% absorbed.

Distribution: Widely distributed.

Metabolism and Excretion: 50% eliminated unchanged in urine, 40% excreted in the feces.

Half-life: 6–9 hr.

TIME/ACTION PROFILE (diuretic effect)

<table>
<thead>
<tr>
<th>ROUTE</th>
<th>ONSET</th>
<th>PEAK</th>
<th>DURATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>PO</td>
<td>2 hr†</td>
<td>6–10 hr†</td>
<td>24 hr†</td>
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</tbody>
</table>

†Single dose

Contraindications/Precautions

Contraindicated in: Hypersensitivity; Hyperkalemia; Concurrent use of potassium supplements or other potassium-sparing agents.

Use Cautiously in: Hepatic dysfunction; Patients with diabetes mellitus (risk of hyperkalemia); Renal insufficiency; OB, Lactation, Pedi: Safety not established.

Adverse Reactions/Side Effects

CNS: dizziness, headache.

CV: arrhythmias.

GI: constipation, nausea, vomiting.

F and E: hyperkalemia, hypernatremia.

MS: muscle cramps.

Misc: allergic reactions.

Interactions

Drug-Drug: ↑ risk of hypotension with acute ingestion of alcohol, other antihypertensive agents, or mints. Use with ACE inhibitors, angiotensin II receptor antagonists, indomethacin, or cyclosporine ↑ risk of hyperkalemia. ↓ lithium excretion. Effectiveness may be ↓ by NSAIDs.

Route/Dosage

PO (Adults): 5–10 mg/day (up to 20 mg).

NURSING IMPLICATIONS

Assessment

• Monitor intake and output ratios and daily weight throughout therapy.

• If medication is given as an adjunct to antihypertensive therapy, BP should be evaluated before adminstration.

• Monitor response of signs and symptoms of hypokalemia (weakness, fatigue, ECG changes, anorexia, nausea, vomiting, constipation). Patients who have diabetes mellitus or kidney disease and geriatric patients are at increased risk of developing these symptoms.

• Periodic ECGs may be monitored during prolonged therapy.

• Lab Test Considerations: Evaluate serum potassium levels before and 1–2 weeks during therapy. May cause ↑ serum magnesium, urea acid, BUN, creatinine, potassium, and uric acid excretion levels. May also cause ↓ sodium levels.

• Discontinue potassium-sparing diuretics 3 days before a glucose tolerance test because of risk of severe hyperkalemia.

Potential Nursing Diagnoses

Excess fluid volume (Indications)

Implementation

• Do not confuse amiloride with amlodipine.

• PO: Administer to sit to avoid interrupting sleep pattern for elimination.

• Administer with food or milk to minimize gastric irritation and to increase bioavailability.
Patient/Family Teaching

- Emphasize the importance of continuing to take this medication at the same time each day, even if feeling well. Take missed doses as soon as remembered unless almost time for next dose. Do not double doses.
- Caution patient to avoid salt substitutes and foods that contain high levels of potassium or sodium unless prescribed by health care professional.
- May cause dizziness. Caution patient to avoid driving or other activities requiring alertness until response to medication is known.
- Advise patient to consult with health care professional before taking any OTC decongestants, cough or cold preparations, or appetite suppressants concurrently with this medication.
- Instruct patient to notify health care professional of medication regimen before treatment or surgery.
- Advise patient to notify health care professional if muscle weakness or cramps, fatigue, or severe nausea, vomiting, or diarrhea occurs.
- Emphasize the need for follow-up visits to monitor progress.
- Hypertension: Reinforce need to continue additional therapies for hypertension (weight loss, restricted sodium intake, stress reduction, moderation of alcohol intake, regular exercise, and cessation of smoking). Medication helps control but does not cure hypertension.
- Teach patient and famliy the correct technique for checking BP weekly.

Evaluation/Desired Outcomes

- Increase in diuresis and decrease in edema while maintaining serum potassium level in an acceptable range.
- Decrease in BP.
- Prevention of hypokalemia in patients taking diuretics.

Why was this drug prescribed for your patient?