midodrine (mye-doe-dreen)

**Classification**
Therapeutic: vasopressors

**Pregnancy Category:** C

**Indications**
Symptomatic management of orthostatic hypotension in patients whose lives are impaired. 

**Action**
Activation of alpha-1 adrenergic receptors in arteries and veins.

**Therapeutic Effects:**
Increase in vascular tone and BP.

**Pharmacokinetics**

**Absorption:**
93% absorbed following oral administration; rapidly converted to desglymidodrine, the active metabolite.

**Distribution:**
Desglymidodrine crosses the blood-brain barrier poorly.

**Metabolism and Excretion:**
Desglymidodrine is 80% excreted by the kidneys.

**Half-life:**
Midodrine—25 min; desglymidodrine—3–4 hr.

**TIME/ACTION PROFILE (blood levels of active metabolite)**

<table>
<thead>
<tr>
<th>ROUTE</th>
<th>ONSET</th>
<th>PEAK</th>
<th>DURATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>PO</td>
<td>rapid</td>
<td>1–2 hr</td>
<td>2–3 hr</td>
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</table>

**Contraindications/Precautions**

**Contraindicated in:**
- Urinary retention
- Severe organic heart disease
- Acute renal disease
- Persistent/excessive supine hypertension
- Pheochromocytoma
- Thyrotoxicosis

**Use Cautiously in:**
- History of hypertension
- Renal impairment
- Hepatic impairment
- Diabetes mellitus
- Visual problems
- Concurrent fludrocortisone
- OB, Pedi: Pregnancy, lactation, or children (safety not established)

**Adverse Reactions/Side Effects**

**CNS:** anxiety, confusion, headache/fullness, hallucinations

**CV:** supine hypertension, bradycardia

**GU:** urinary urge/retention/frequency, dysuria

**Derm:** facial flushing, pruritus

**Neuro:** paresthesia

**Misc:** chills, pain

**Interactions**

**Drug-Drug:**
- Risk of bradycardia with digoxin, beta blockers, and antipsychotics
- Concurrent use with other alpha-adrenergic agonists including phentolamine, phenoxybenzamine, and α-blockers may result in hypotension. Effects may be potentiated by α-adrenergic blockers including prazosin, terazosin, and doxazosin.
- Effects of fludrocortisone (or initial dose of fludrocortisone or salt intake prior to midodrine).

**Route/Dosage**

**PO (Adults):**
- Orthostatic hypotension—10 mg three times daily
- Urinary incontinence—2.5–5 mg two to three times daily

**Renal Impairment**

**PO (Adults):**
- 2.5 mg three times daily

**NURSING IMPLICATIONS**

**Assessment**
- Monitor supine and sitting BP prior to and during therapy.
- Assess pattern of urinary output prior to and during treatment for incontinence.
- Lab Test Considerations:
  - Monitor renal and hepatic function prior to and periodically during therapy.

**Potential Nursing Diagnoses**

- Decreased cardiac output (indications)

**Implementation**

**PO:**
- Administer 3 times daily at 3–4 hr intervals. Do not administer after last meal or within 4 hr of bedtime.

**Patient/Family Teaching**
- Instruct patient to take midodrine as directed. First dose should be taken on or shortly after arising, second dose at midday, and third dose should be taken before evening meal and at least 4 hr before bedtime. Take missed doses as soon as remembered unless almost time for next dose; do not double doses.

**Adverse Reactions/Side Effects**

CN: anxiety, confusion, headache/fullness, hallucinations
CV: supine hypertension, bradycardia
GU: urinary urge/retention/frequency

**Discontinued**

**References**


Advise patient to notify health care professional of all Rx or OTC medications, vitamins, or herbal products being taken and to consult with health care professional before taking other medications.

Evaluation/Desired Outcomes
- Decrease in signs and symptoms of orthostatic hypotension.
- Decrease in the incidence of urinary incontinence.

Why was this drug prescribed for your patient?