Orthostatic hypotension - management


Nonpharmacologic management

- Slow changes in position
- Stockings: to increase venous return / decrease lower extremity pooling
- Temperature: avoid extremes
- Activities:
  - Before rather than after a meal
  - Afternoon rather than morning
  - Swimming pool
  - Avoid heavy lifting
- Nighttime: slight elevation in head of bed to attenuate nocturnal diuresis
- Meals: liberalize salt and water intake

Pharmacologic management

- **Fludrocortisone**
  - Mechanism: sodium retention
  - Full effect: 1-2 weeks
  - Dosing: 0.1mg po qd → titrate up 0.1mg every 1-2 weeks
  - Maximum: usually no more than 0.4mg daily required, but can be titrated higher
  - Dosing interval: qd to bid (half-life 2-3 hours, but qd dosing often sufficient)
  - Side effects:
    - Hypokalemia (50% in 2 weeks)
    - Hypomagnesemia (5%)
    - Congestive heart failure in those pre-disposed
    - Headache (more in young patients, like astronauts using on return to earth)
    - Need to increase dose of warfarin
    - Glucocorticoid effect rarely seen at doses used

- **Midodrine**
  - Mechanism: alpha-1-adrenoreceptor agonist → peripheral vascular resistance
  - Dosing: 2.5mg at breakfast and lunch → increase 2.5mg daily until response seen
  - Maximum 30mg daily
  - Dosing interval: best used in morning; may need a third dose in the afternoon
  - Side effects:
    - Hypertension (particularly supine): according to authors, angina rarely seen
    - Piloerection (gooseflesh)
    - Paresthesia of scalp
    - Pruritus

- **Erythropoietin**
  - Increased RBC and blood pressure by 10mmHg
  - Not used frequently

- Studies with all of these drugs are fairly small, without head to head comparisons; however, these are generally regarded as safe and efficacious after years of use

- Authors feel that a majority of patients can gain adequate control using maximal doses of fludrocortisone and midodrine if side effects are tolerable