ASYMPTOMATIC HYPERTENSION & ANTIHYPERTENSIVE INITIATION

- Asymptomatic adult patient with markedly elevated BP (SBP >180 and/or DBP >120)
- Not currently on antihypertensives
- Not pregnant
- BP confirmed on at least 2 readings in the ED

**Why is this important?**
- Our patients have difficulty accessing primary care
- Initiation of antihypertensives in the ED is associated with reduction in adverse events AND ED bouncebacks!

1. Mild symptoms such as headache, lightheaded, nosebleed does not exclude someone and does not necessarily indicate need for workup for end organ damage

2. Guidelines state no need to check screening labs/EKG in ED. However BMP, EKG, UA (for proteinuria) are recommended in the outpatient setting for workup of newly diagnosed hypertension. Results may affect choice of antihypertensive, may identify occult hypertensive emergency (AKI), and will smooth follow up.

3. Limitations to follow up availability represent a significant challenge to implementing this protocol. Options include:
   - Refer back to PCP if pt has one
   - Place new referral for PCP, include in text need for follow up within 1 month and if applicable need for labs within 1-2 weeks (will be difficult to achieve)
   - Discuss with Care Management
   - Bridge Clinic may become an option when available

**Is there concern for end organ damage (ie. hypertensive emergency) such as chest pain, altered mental status, neurologic changes, severe headache?**

- **YES** Does not qualify as asymptomatic hypertension; evaluate and treat hypertensive emergency
- **NO** Is there an alternative causes of hypertension in ED such as pain, anxiety, substance intoxication or withdrawal, alternate pathology?

- **NO** Age >65?
  - **YES** Recommend against initiation of antihypertensives in the ED. BP management is complex in this age group due to increased liability of blood pressure, and there is less evidence that tight BP control is beneficial. Consider phone call to PCP to discuss management & urgent referral to PCP.
  - **NO** BMP, EKG recommended UA if possible
    - Abnl Not checked or wnl
    - Consider initiating antihypertensive
      - Do NOT need to keep patient in ED to monitor for effect
      - Refer for follow up (within 1 month)

<table>
<thead>
<tr>
<th>Drug</th>
<th>Dosage</th>
<th>Side Effects</th>
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</thead>
<tbody>
<tr>
<td>HCTZ</td>
<td>12.5mg daily</td>
<td>Avoid if h/o acute gout, risk of hyponatremia, risk of hypokalemia Follow up BMP in 1-2 weeks</td>
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<tr>
<td>Lisinopril</td>
<td>10mg daily</td>
<td>Avoid if risk of hyperkalemia. Risk of angioedema 0.3-0.7%. Dry cough occurs in 4-35%. Follow up BMP in 1-2 weeks</td>
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<tr>
<td>Losartan</td>
<td>25mg daily</td>
<td>Avoid if risk of hyperkalemia. Risk of angioedema 0.1% (up to 10% if previous angioedema with ACE-I) Follow up BMP in 1-2 weeks</td>
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<tr>
<td>Amlodipine</td>
<td>5mg daily</td>
<td>Causes lower extremity edema in 2-15% of patients No need for follow up BMP</td>
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This guideline was ratified by the Emergency Department Faculty at Maine Medical Center in June 2024. It represents our expert opinion and is not necessarily applicable to all institutions. It is intended to be a reference for providers caring for patients and is not intended to replace providers’ clinical judgment.

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