Blood Pressure Control in Primary Care

- Aspirin when appropriate
- Blood pressure control
- Cholesterol management
- Smoking cessation
Screening and treating hypertension can improve the health of patients and the population. Many patients don’t know that they have hypertension, are not on treatment or are not controlled.

Identifying hypertension

Accurate blood pressure measurement is critical for establishing the diagnosis. Tools to help practice staff accurately measure blood pressure can be found at [http://ophic.ouhsc.edu/rpr](http://ophic.ouhsc.edu/rpr)

Once a patient has been identified as hypertensive, clinicians should:

1. Assess lifestyle factors that can elevate blood pressure, including diet, alcohol, physical inactivity, and obesity;
2. Identify other cardiovascular risk factors or concomitant disorders that will guide treatment;
3. Search for identifiable secondary causes of high blood pressure;
4. Determine extent of end-organ damage

Target blood pressure:
For most patients, a goal of 140/90 should be used to guide treatment.
JNC 8 Approach to HTN Treatment

For adults aged ≥18 years with hypertension:
- Implement long term lifestyle changes
- BP goal 140/90; consider 150/90 if ≥60

First-line therapy

For most patients initiate thiazide-type diuretic or ACEI or ARB or CCB, alone or in combination.
- If CKD present: Initiate ACE or ARB, alone or in combination.
- If black: Initiate thiazide-type diuretic or CCB, alone or in combination.

Titrate medication

Maximize initial medication and/or Add second medication (use medication class not previously selected and avoid combined ACE/ARB)

Long-term plan

- Continue to monitor BP level
- Reinforce lifestyle & medication adherence
- Increase medication dosage or add medication when needed

Lifestyle modification remains a critical component of health promotion and ASCVD risk reduction, both prior to and in concert with the use of antihypertensive medications.
**Choosing an antihypertensive drug class**

Multiple drug classes can effectively lower blood pressure. Patient characteristics should guide the initial choice.

<table>
<thead>
<tr>
<th>Drug Class</th>
<th>Best Suited For</th>
<th>Risks/Concerns</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thiazide-type diuretics</td>
<td>First-line treatment of hypertension in most patients</td>
<td>Monitor kidney function &amp; potassium</td>
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<tr>
<td>ACE-I or ARB</td>
<td>Diabetes&lt;br&gt;Chronic kidney disease&lt;br&gt;Congestive heart failure&lt;br&gt;Ischemic heart disease</td>
<td>Monitor kidney function &amp; potassium Cough with ACE-I (can switch to ARB)</td>
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<tr>
<td>CCB</td>
<td>Coronary artery disease (if beta blocker intolerant)</td>
<td>Lower extremity edema Constipation</td>
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<tr>
<td>Beta-blockers</td>
<td>Coronary artery disease&lt;br&gt;Congestive heart failure</td>
<td>No longer first choice for uncomplicated hypertension. Use with caution in obstructive pulmonary disease</td>
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</tbody>
</table>

Several other medication classes, including loop diuretics, potassium-sparing diuretics, alpha blockers, and direct reach inhibitors may have a role in patients requiring multiple medications to control their hypertension.

**References**


Drug classes: http://www.heart.org/HEARTORG/Conditions/HighBloodPressure/PreventionTreatmentofHigh-BloodPressure/Types-of-Blood-Pressure-Medications_UCM_303247_Article.jsp