Hypertension: The Silent Threat

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Disclosures

- Nothing to disclose
“Most of the time, hypertension has no obvious symptoms to indicate that something is wrong.”- American Heart Association
Outline

- Definitions
- The ideal workup
- The ideal treatment
- Why are most people non-compliant
- How can we remove the threat
- Most common diagnosis in the United States
- Affects > 116 million in the US alone
- There are 1.3 billion people affected worldwide and 10 million die yearly (WHO)
- Major risk factor for stroke, MI, vascular disease and CKD.
Definitions
<table>
<thead>
<tr>
<th>BLOOD PRESSURE CATEGORY</th>
<th>SYSTOLIC mm Hg (upper number)</th>
<th>DIASTOLIC mm Hg (lower number)</th>
</tr>
</thead>
<tbody>
<tr>
<td>NORMAL</td>
<td>LESS THAN 120</td>
<td>and</td>
</tr>
<tr>
<td>ELEVATED</td>
<td>120 – 129</td>
<td>LESS THAN 80</td>
</tr>
<tr>
<td><strong>HIGH BLOOD PRESSURE</strong></td>
<td></td>
<td><strong>HIGH BLOOD PRESSURE</strong></td>
</tr>
<tr>
<td>(HYPERTENSION) <strong>STAGE 1</strong></td>
<td>130 – 139</td>
<td><strong>STAGE 1</strong></td>
</tr>
<tr>
<td><strong>HIGH BLOOD PRESSURE</strong></td>
<td></td>
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<tr>
<td>(HYPERTENSION) <strong>STAGE 2</strong></td>
<td>140 OR HIGHER</td>
<td>or</td>
</tr>
<tr>
<td><strong>HYPERTENSIVE CRISIS</strong></td>
<td></td>
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<tr>
<td>(consult your doctor immediately)</td>
<td>HIGHER THAN 180</td>
<td>and/or</td>
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<tr>
<td></td>
<td>and</td>
<td>HIGHER THAN 120</td>
</tr>
</tbody>
</table>
• Can be primary: environmental or genetic causes (90% adult cases)

• Secondary: renal, endocrine or vascular causes (10% adult cases)
Risk factors
- Modifiable risk factors: unhealthy diets, physical inactivity, tobacco and alcohol use, and obesity.

- Non-modifiable risk factors: family history, age and co-existing diseases ie. diabetes or kidney disease.
The ideal workup

- Serial measurements of blood pressure
- Focused medical history and PE
- 12 lead ECG
- Laboratory baseline evaluations: urinalysis, fasting blood glucose or A1c, Ht, serum Na and K, GFR, Lipid profile (after a 12 hr fasting period)
What is the treatment?
Healthy diet
Less salt
Active lifestyle
- ACEIs
- Ca channel blockers
- Thiazide diuretics
- Loop diuretics
- ARBs
- Beta-blockers
Why are people non-compliant

- Fears and negative images of antihypertensive drugs.
- Lack of basic background knowledge about hypertension.
- Unsatisfactory medical appointments: too long, few explanations by the physician and limited doctor-patient interaction.
How do we remove the threat

• Meet the people where they are found
• Identify those who need help getting medications and help them
Angolan experience

- “I will only take the medications when I have a headache”.
- Medications are too costly!
Conclusion

- Hypertension affects a significant number of people worldwide
- Lifestyle modifications and medications are needed to control hypertension
- Hypertension can be treated but not cured
Works consulted

- https://www.who.int/news-room/fact-sheets/detail/hypertension