

Summary of Hypertension On Call

Definitions of Hypertension

All classifications are based on age/weight-based norms (see reference)

Prehypertension:

- SBP and/or DBP between 90th and 95th%

Stage 1 Hypertension:

- SBP and/or DBP = 95th%, but = 99th% + 5mmHg

Stage 2 Hypertension:

- SBP and/or DBP > 99th% + 5mmHg

Stage 2 is further classified as Hypertensive Urgency versus Emergency based on signs and symptoms of end-organ damage:

- CNS (headache, seizure, lethargy, irritability)
- Eyes (papilledema, visual changes)
- Cardiac (cough, SOB, signs of heart failure, gallop)
- Renal (hematuria, proteinuria)

Initial Approach to On-Call Evaluation

- Repeat blood pressure with manual cuff
 - o Cuff should be appropriate size (bladder = 80% of arm circumference, 40% upper arm length)
- Assess for other potential acute causes of hypertension
 - o Medications (sympathomimetics, steroids, OCPs, cocaine, PCP, etc)
 - o Pain
 - o Increased ICP (other changes in vital signs)
 - o Coarctation of the Aorta (four extremity blood pressures)
- Classify stage of hypertension
 - o If Stage II, look for signs or symptoms of end-organ damage

Management of Hypertension

If Prehypertension or Stage I Hypertension, no immediate intervention required

- Communication with primary care physician is essential to complete further w/u

If Hypertensive Urgency:

- Obtain IV access
- If acute, treat medically:
 - o Hydralazine 0.2mg/kg/dose IV (max 20mg/dose)
 - o Labetolol 0.2mg/kg/dose IV (max 20mg/dose)
- If chronic (long-standing renal disease, etc):
 - o Consult Nephrology
 - o Oral medications potentially (Clonidine)

If Hypertensive Emergency:

- As above, and contact Intensive Care Unit immediately