

Hypertensive Urgency/Emergency

Hypertensive Emergency

30 Second Review Hypertensive Emergency RN

DEF: Hypertensive state that is causing signs or symptoms of acute target organ damage.

S/S: Patient complains of new neurological signs and symptoms, ↑ confusion, change in LOC, Seizure, ↑ chest or abdominal pain, or ↑ SOB with or without edema

RX: Prepare for transport to ER. Notify practitioner. While awaiting transport start IV and Oxygen, continue to monitor BP.

SKILL LEVEL: RN

DEFINITIONS: A hypertensive emergency involves a patient with significantly elevated blood pressure and signs or symptoms of acute, ongoing target-organ damage. Optimal therapy varies, but should always be done in a monitored hospital setting.

Hypertensive urgency occurs when blood pressure readings are 180/120 or higher -- but there is no evidence of damage to the body's organs. Most patients with significantly elevated blood pressure (systolic pressure ≥ 180 and/or diastolic pressure ≥ 120 mmHg) have no acute, end-organ injury ("asymptomatic hypertension"). For these patients, blood pressure can usually be brought down safely at the facility. See point 6 in the Plan, and attachment A.

DATA BASE:

Subjective:

Visual field deficit or other focal neurological complaints

Increasing confusion

Chest pain

Shortness of breath

Acute, severe abdominal pain or back pain, which might be due to aortic aneurysm growth or dissection.

Objective: Increased blood pressure (frequently over 180 systolic and/or 120

Hypertensive Urgency/Emergency

diastolic) associated with any of the following:

Increasing confusion or changing level of consciousness, with or without headache, nausea, and vomiting

Seizure

Symptoms of evolving stroke, including focal neurological symptoms such as motor weakness, double vision, or ataxia

Acute chest or abdominal pain

Acute and increasing shortness of breath with or without swelling or edema of the lower extremities

Assessment: Possible Hypertensive emergency

Plan:

1. **Do not attempt medical treatment of patients with a hypertensive emergency on site. Lowering of the blood pressure must be done in a monitored hospital environment.**
2. **If patient has significantly elevated blood pressure and signs or symptoms of acute, ongoing target-organ damage, arrange emergency hospital transport.**
3. While awaiting transport start IV and contact practitioner.
4. Administer Oxygen 4-8 liters/minute by nasal cannula or mask
5. Thoroughly check and elicit medical history if possible, including history of taking oral BP medications:
 - Time last taken.
 - Names and doses of all medications.
 - Any recent blood pressure measurements.
6. If patient blood pressure is 180/120 even after repeat check, and there is no evidence of end organ damage, this falls into the category of "hypertensive urgency". If you are concerned about the patient's condition, call the provider to discuss, and follow the Nursing Guidelines outlined below.

Hypertensive Urgency/Emergency

Nursing Education:

1. Hypertensive emergency is relatively rare. When it does occur, it may be related to untreated or unrecognized hypertension, non-compliance with blood pressure medication, or the use of a drug or medication that exacerbates high blood pressure.
2. Headache alone is rarely a symptom of hypertensive emergency in the absence of objective neurological findings.
3. Organ damage associated with hypertensive emergency may include: Confusion or other changes in mental status, stroke, heart failure, acute coronary syndrome (unstable angina), pulmonary edema, aneurysm (aortic dissection), eclampsia (during pregnancy).
4. The most important aspect of care for the patient with a hypertensive emergency is assuring that high-quality outpatient follow-up is available. A large proportion of patients without follow-up will return to the hospital with a recurrent hypertensive emergency.
5. It is generally unwise to lower the blood pressure too quickly or too much, as ischemic damage can occur in vascular beds that have grown accustomed to the higher level of blood pressure (ie, autoregulation). For most hypertensive emergencies, mean arterial pressure should be reduced gradually by about 10 to 20 percent in the first hour and by a further 5 to 15 percent over the next 23 hours. This should be done in a monitored hospital setting.
6. Severe hypertension with acute neurologic signs or symptoms is usually the most complicated and difficult clinical scenario, as the differential diagnosis includes varied conditions that have disparate treatments, only some of which routinely involve lowering the blood pressure.
7. Patients with acute ischemic stroke-in-evolution are most often not given antihypertensive drugs unless they are candidates for tissue plasminogen activator and their initial blood pressure is $\geq 185/110$ mmHg or if their initial blood pressure is $\geq 220/120$, even if they are not candidates for reperfusion therapy.

Hypertensive Urgency/Emergency

APPROVED:

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Date

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Date

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Date

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NURSING GUIDELINES

ELEVATED BLOOD PRESSURE (Asymptomatic patient)

1. For a pressure of **140-160/90-100** (MILD hypertension):
 - a. Have patient sit for 5-10 minutes and recheck. Often an elevated BP is seen if taken right after walking to Medical.
 - b. If BP remains elevated, schedule for weekly BP x 4 then schedule chart review.
2. For a pressure of **160-180/100-110** (MODERATE hypertension):
 - a. Again have patient sit for 5-10 minutes and recheck.
 - b. If BP remains elevated, schedule BP 2-3 x weekly x 2 weeks. If trending down, schedule chart review; if remaining elevated, schedule SNR: HTN (new diagnosis).
3. For a pressure of **180-210/110-120** (Severe hypertension)
 - a. Recheck after 5-10 minutes.
 - b. Perform EKG.
 - c. Consider drawing CBC, CMP, Fasting Lipid Panel
 - d. Schedule with provider in next clinic.
 - e. Consider calling provider for additional instructions.
 - f. If vague non-focal neurologic symptoms then call provider.
4. For a pressure **>210/120** (Very severe hypertension). Call provider.

Patient Education:

If you are overweight, lose weight.

Exercise; start low, go slow but increase activity.

Avoid adding salt to meals.

Avoid canteen items that are high in sodium.

Take prescribed medications as directed every day.

Learn to control emotions such as anger and redirect them in a positive way.