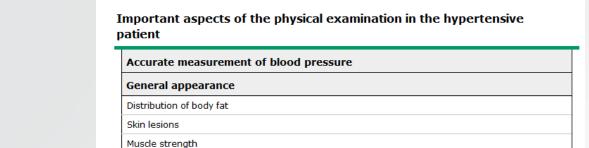
Important aspects of the history in the patient with hypertension

uration of hypertension	Presence of other risk factors		
Last known normal blood pressure	Smoking		
Course of the blood pressure	Diabetes		
rior treatment of hypertension	Dyslipidemia		
Drugs: types, doses, side effects	Physical inactivity		
ntake of agents that may cause	Dietary history		
pypertension	Sodium		
Nonsteroidal antiinflammatory drugs	Processed foods		
Estrogens	Alcohol		
Adrenal steroids	Saturated fats		
Cocaine	Psychosocial factors		
Sympathomimetics	Family structure		
Excessive sodium	Work status		
amily history	Educational level		
Hypertension	Sexual function		
Premature cardiovascular disease or death	Features of sleep apnea		
Familial diseases: pheochromocytoma, renal disease, diabetes, gout	Early morning headaches		
	Daytime somnolence		
Symptoms of secondary causes	Loud snoring Erratic sleep		
Muscle weakness	Errauc sieep		
Spells of tachycardia, sweating, tremor			
Thinning of the skin			
Flank pain			
Symptoms of target-organ damage			
Headaches			
Transient weakness or blindness			
Loss of visual acuity			
Chest pain			
Dyspnea			
Claudication			



Alertness

Fundoscopy

Hemorrhage

Papilledema

Cotton wool spots

Neck

Thyroid

Heart

Size

Rhythm

Sounds

Lungs

Rhonchi

Rales

Abdomen

Renal masses

Arteriolar narrowing and arteriovenous nicking

Palpation and auscultation of carotids

Bruits over aorta or renal arteries

Neurologic assessment

UpToDate[®]

Visual disturbance Focal weakness Confusion

Femoral pulses

Extremities

Peripheral pulses

Edema

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Diagnosing

- All adults 18 years and older without known HTN should be screened for elevated BP (USPSTF et al., 2021).
- To diagnose HTN the provider should use an average of two or more readings obtained on two or more occasions Out of office BP measurements (ambulatory or home BP monitoring) are recommended to confirm the diagnosis of HTN before starting treatment

(USPSTF et al., 2021).

JNC8, ACC/AHA guidelines.... OMG! Confusion confusion

Updates in 2023 after years of resistance, primary care is slowly abandoning JNC8 guidelines and adopting the ACC/AHA 2017 guidelines

American Academy of Nurse practitioners 2017 ACC/AHA and JNC-8 hypertension guidelines

FYI: September 2018 - The American College of Cardiology (ACC) / American Heart Association (AHA) hypertension guideline published in November 2017 introduced new blood-pressure categories lowering the threshold for the diagnosis of hypertension. Items on each of the AANPCB certification examinations are reviewed each year by clinical experts for relevancy to current and best practice. The 2018 certification examinations use the 2017 ACC/AHA and JNC-8 guidelines to reference test items. While treatment targets may differ among various guidelines, it is important to keep evaluation of the individual's health as the central concern.

Diagnosis of HTN according to JNC8 Followed by AAFP and

- A diagnosis of HTN should be made under the following circumstances:
- Age <60 years: SBP ≥140 mm Hg and/or DBP ≥90 mm Hg at ≥2 visits
- Age 60 years or older: SBP ≥150 mm Hg and/or DBP ≥90 mm Hg at
 ≥2 visits
- Age 60 years or older with CKD or diabetes: SBP ≥140 mm Hg and/or DBP ≥90 mm Hg at ≥2 visits
- Pre-hypertension
 - SBP ≥120 mm Hg and/or DBP ≥80 mm Hg at ≥2 visits

blood pressure classification acc/aha: 2017

Blood Pressure Categories



BLOOD PRESSURE CATEGORY	SYSTOLIC mm Hg (upper number)		DIASTOLIC mm Hg (lower number)
NORMAL	LESS THAN 120	and	LESS THAN 80
ELEVATED	120 – 129	and	LESS THAN 80
HIGH BLOOD PRESSURE (HYPERTENSION) STAGE 1	130 – 139	or	80 – 89
HIGH BLOOD PRESSURE (HYPERTENSION) STAGE 2	140 OR HIGHER	or	90 OR HIGHER
HYPERTENSIVE CRISIS (consult your doctor immediately)	HIGHER THAN 180	and/or	HIGHER THAN 120

Diagnostics: Hypertension

Initial Tests (lab, imaging)

- Hemoglobin or hematocrit or CBC
- Complete urinalysis (may reveal proteinuria, check kidney function)
- •CMP (Potassium, calcium, creatinine), and uric acid
- •TSH
- Lipid panel (total, HDL, LDL, triglyceride [TG])
- Fasting blood glucose or hemoglobin A1c
- Urinalysis (to evaluate albumin/creatinine ration)
- •EKG to evaluate possible presence of left ventricular hypertrophy (LVH) or rhythm abnormalities,

Follow-Up Tests & Special Considerations

consider echocardiogram stress test if initial diagnostic test are abnormal.

Special tests only if suggested by history, physical, or labs. In particular, consider possibility of sleep apnea.

Ambulatory (24-hour) BP monitoring if "white coat" HTN is suspected, episodic HTN, or autonomic dysfunction

Home BP monitoring is effective, especially when white coat HTN is a consideration; elevated home BPs correlate with adverse outcomes, possibly more so than office BPs, and normal readings are reassuring.

Treatment: Shared decision-making

- Individual treatment goals should be jointly established with patients after discussion of the anticipated potential benefits and harm
- Educate on adverse effects of antihypertensive.
 - All antihypertensives associated with postural hypotension.
- Educate importance of compliance with medications.
 - Uncontrolled hypertension leads to end organ damage (e.g., stroke, heart failure, myocardial infarction, renal insufficiency, retinopathy)
- Stress the importance of blood pressure measurement techniques.
- Non-pharmacological: Recommend lifestyle improvements, including diet, exercise, and reducing or eliminating tobacco/alcohol. (see next slide)

HTN Management plan

- Behavioral modifications:
 - Diet modification: DASH diet with low sodium intake
 - Limit alcohol
 - Stop smoking
 - Routine exercise (30 minutes 5 times a week)
 - Engage in stress reduction activities
 - Discontinue unnecessary medications that can raise b/p