Hypertension Assessment


**Canadian Family Medicine Clinical Card**

**Hypertension Assessment**

**PATIENT:** Back, arm supported, empty bladder, seated comfortably with legs uncrossed X 5 min, no talking prior/to measurement.

**CUFF:** Over bare arm, 3 cm above elbow crease, at level of right atrium, width & length of cuff bladder should be 40% & 80-100% of arm circ.

**MEASUREMENT:** Inflate 30 mmHg above radial pulse obl., deflate by 2 mmHg per sec, do 3 times, at least 60 sec apart; discard 1st, take avg. of 2nd & 3rd.

**Measure BP**

≥ 180/110  
DM ≥ 130/80  
non-DM and AOBP ≥ 135/85  
or non-AOBP ≥ 140/90

**HYPERTENSION**

≥ 180/110  
DM ≥ 130/80  
non-DM and AOBP ≥ 135/85  
or non-AOBP ≥ 140/90

**EMS/ED**

**BP triggers BP visit**

≥ 135/85  
evening

≥ 130/80  
home BPs ≥ 135/85

**No Hypertension**

ABPM - daytime ≥ 135/85  
evening ≥ 130/80

**White-Coat Hypertension**

**Measurements ideally by automated BP machines (AOBP)**

**Routine laboratory assessment (if dx):** Na, K, Cr (or eGFR), FBG, fasting lipid panel, urinalysis (for blood & prot), ECG (for LVH). Consider ACR.

**History and Physical: Red Flags**

**GENERAL SIGNS:** abrupt or severe onset, or ages <25 or >55

**CONTRIBUTING FACTORS:** ↑ Salt intake, sedentary, stress

**HYPERTHYROIDISM:** Palpitations, sweating, tremor, anxiety, freq bowel movements, weight loss, vision changes, goiter. TSH

**AORTIC COARCTATION:** Interscapular murmur, delayed femoral pulses, asymmetric BP across both arms or leg. CXR, CT-Angio

**CUSHINGS:** Easy bruising, truncal obesity, hyperglycemia, hirsutism, prox muscle weakness, thin skin, ecchymosis, facial plethora, round face, buffalo hump, striae, depression, anxiety, psychosis, 24-hr urine cortisol excretion, ↑ Ald:renin ratio

**OSA:** Snoring, witnessed apneas, daytime drowsiness, AM headache, impaired concentration. Sleep study with O2 saturation monitoring

**RENALE的情况:** Hx of UTIs/obstructions, hematuria, NSAID abuse, FamiHx of polycystic kidney disease, abdominal mass. Renal US MEdS/HERBs: NSAIDs, OCP, steroids, pseudoephedrine, cocaine

**PHEOCHROMOCYTOMA:** episodes of headaches, sweating & ↑ HR

**Plasma Fractionated Metanephrines,** 24hr urine for metanephrines

**PERIPHERAL ARTERY DISEASE:** Claudication, asym or delayed femoral pulses, cold extremities and weak/absent pedal pulses; carotid, abdominal, femoral bruits. ABI, US Doppler

**HEART FAILURE:** Exertional SOB, fatigue, PND, orthopnea, S3, murmurs; ↑ JVP, displaced apical impulse, basilar crackles, peripheral edema. ECG, ECHO, Holter Monitor

**LVH:** S4, sustained apical impulse. ECG, ECHO, Holter Monitor

**STROKE/TIA:** on PMHx, abnormal strength, gait, speech, cognition. MRI, CT

**HYPERTENSIVE RETINOPATHY:** Advanced findings include hemorrhages, exudates, papilledema on fundoscopy. Ophthalmology referral


*Note:* This information is not meant to replace customized patient assessment nor clinical judgment. The Card is meant to highlight key considerations in particular clinical scenarios, largely informed by relevant guidelines in effect at the time of publication. The authors cannot assume any liability for patient outcomes when this card is used.