	Southern Philippines Medical Center **CLINICAL PRACTICE GUIDELINES** **Title: Guidelines for Patients with Hypertension**	

OBJECTIVE: To provide efficient and cost-effective management choices for the family medicine resident or consultant dealing with patients diagnosed with hypertension.

SCOPE: This shall apply for the management of patients with a diagnosis of hypertension.

GUIDELINES:

HISTORY

History of Present Illness: ask for the following signs/symptoms:

- € Headache
- € Dizziness
- € Blurring of Vision
- € Nape Pain
- € Vomiting
- € Chest Pain
- € Palpitation

Past Medical History:

- € If hypertensive, please indicate the highest blood pressure and the usual blood pressure
- € Co-existing chronic disease such as diabetes, dyslipidemia, chronic kidney disease, thyroid disease, congenital blood vessel disorders

Family History:

- € Hypertension
- € Cardiovascular Disease
- € Diabetes Mellitus
- € Hypercholesterolemia

Personal and Social History:

- € If smoker, ask for Pack Years
- € If alcoholic beverage drinker, ask for Glass Per Day
- € Unhealthy diet (high in sodium)

- Physical Inactivity / Sedentary Lifestyle

PHYSICAL EXAMINATION

- Complete Vital Signs: blood pressure, heart rate, respiratory rate, temperature
- Weight and Height; compute for Body Mass Index (BMI)
- Waist/hip ratio
- Circulation and heart: pulse rate/rhythm/character, jugular venous pulse/pressure, apex beat, extra heart sounds, basal crackles, peripheral edema, radio-femoral delay
- Other organs/systems: enlarged kidneys, neck circumference >40cm (obstructive sleep apnea), enlarged thyroid
- Fundoscopy: (perform for all hypertensive stage 2 patients)

DIAGNOSTICS

- Request for 12-lead ECG, urinalysis, FBS, creatinine, serum K and lipid profile to determine co-morbidities and baseline values
- After 6-12 months, repeat 12-lead ECG, urinalysis, FBS, creatinine, serum K and lipid profile

DIAGNOSIS

Diagnosis is based on the average of two or more properly measured blood pressure readings from two or more clinical visits taken on two separate days:

- Normal (SBP <120 or DBP <80 mmHg)
- Prehypertension (SBP 120-139 or DBP 80-89 mmHg)
- Hypertension Stage I (SBP 140–159 or DBP90–99 mmHg)
- Hypertension Stage II (SBP ≥160 or DBP≥100 mmHg)

TREATMENT

Non-pharmacologic

- Lifestyle modification remains the cornerstone for the management of hypertension
- Sodium restriction to as low as 1500 mg/day
- Dietary Approaches to Stop Hypertension (DASH) meal plan
- Moderate-to-vigorous exercise 30-60 minutes at least 3-5 times a week

- Abstinence from alcohol or moderate alcohol intake
- Weight loss of ≥ 5% of the baseline weight for those who are overweight or obese
- Smoking cessation

Pharmacologic

- Hypertension Stage I
  - ACE inhibitors or ARBs, CCB, thiazide/thiazide-like diuretics, either as monotherapy or in combination
  - Beta-blockers may be used as initial therapy in hypertensive patients with coronary artery disease, acute coronary syndrome, high sympathetic drive and pregnant women
- Hypertension Stage II
  - 2-drug combination for most

    *Preferred combinations: ACE-Inh/ARB + CCB, ACE-Inh/ARB + HCTZ
    * Patients with hypertension who continue to be uncontrolled on 3 drug combinations one of which is a diuretic are considered to have RESISTANT HYPERTENSION and warrant referral to specialists for work-up or initiation of second line agents
- Persons with hypertension and diabetes
  - Low-dose combination of a RAAS blocker (ACE-I or ARB) with a CCB or thiazide/thiazide-like diuretic, preferably using a single-pill combination
- Persons with hypertension and CKD
  - ACE inhibitors, ARBs, Thiazide-like diuretics, or Dihydropyridine Calcium Channel Blockers to reduce CV events in patients with CKD
- Hypertension in pregnancy
  - Methyldopa, Calcium Channel Blockers or Beta Blockers are first line drugs
  - ACE inhibitors and ARBs are generally not recommended
- Hypertension in pediatric population
  - ACE inhibitors (Enalapril, Captopril), ARBs (Losartan, Valsartan), or calcium channel blockers (Amlodipine)
  - For children with co-existing CKD, proteinuria or diabetes mellitus, an ACE inhibitor or ARB is recommended

RECOMMENDATIONS

- € Evaluate adherence to antihypertensive treatment as appropriate at each visit and prior to escalation of antihypertensive treatment
- € Further investigations for secondary hypertension should be carefully chosen based on information from history, physical examination and basic clinical investigations
- € Follow-up after 1 month until BP target is achieved then every 3-6 months if BP target is already achieved

REFERENCES

- Executive Summary of the 2020 Clinical Practive Guidelines for the Management of Hypertension in the Philippines
- 2020 International Society of Hypertension Global Hypertension Practice Guidelines
- Clinical Pathways for the Management of Hypertension in Family and Community Practive

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