

# HYPERTENSION

The condition when a person's blood pressure is elevated and may increase the risk of coronary artery disease, heart failure, myocardial infarction, cerebral vascular accidents and renal failure.

## Clinical Findings

### Subjective:

- Headache (occipital area)
- Light-headedness
- Tinnitus
- Easy fatigue
- Visual disturbances
- Palpitations

### Objective:

- Blood pressure greater than 140/90 mm Hg
- Retinal changes
- Renal pathology
- Epistaxis
- Cardiac hypertrophy

## Four stages of hypertension

- Mild: systolic- 140 to 159, diastolic 90 to 99
- Moderate: systolic- 160 to 179, diastolic- 100-109
- Severe: systolic- 180 to 209, diastolic- 110 to 119
- Very severe: systolic  $\geq$  210, diastolic  $\geq$  120

## Essential hypertension

Anxiety and other stresses are believed to play a role in releasing a pressor from kidneys that causes chronic vasoconstriction, thereby raising blood pressure.

## Renal hypertension

Narrowing of the lumen of a renal artery as a result of atherosclerosis causes release of renin.

## Malignant hypertension

Results from sustained hypertension of any form, which causes necrosis of the arterioles and proliferative changes of the renal arteries leading to renal failure, CVA, and heart failure if untreated.

## Hypertensive crisis

May be caused by endocrine disorders (pheochromocytoma), increased intracranial pressure, and encephalopathy.

## Most common medications for hypertension

- Diuretic
- Beta blocker
- Calcium antagonist
- Receptor blocker
- Angiotensin converting enzyme (ACE) inhibitor

## TEST YOUR KNOWLEDGE

- What are the subjective and objective clinical findings of hypertension?
- What are the therapeutic interventions (lifestyle and pharmacological) of hypertension?
- As a medical practitioner, how would you give counseling to a client with hypertension?