

HYPERTENSION



Dr. Karima Elshamy

Faculty of Nursing

Mansoura University

Egypt

Learning Objectives:

- Define hypertension
- List hypertension classification
- Enumerate risk factors for hypertension
- Identify clinical manifestations of hypertension
- Determine diagnostic evaluation of hypertension
- Identify the non-pharmacological management of hypertension
- Explain nursing management of hypertension

Definition:

- Systolic blood pressure of over 140 mm Hg or/and diastolic pressure of over 90 mm Hg on more than one occasion.**

Classification:

- A. Essential (primary) hypertension: of unknown cause.**

- B. Secondary hypertension : due to specific causes as renal disease, medications, adrenal disease and hypertension in pregnancy.**

Risk factors:

- 1) Genetic**
- 2) High sodium, cholesterol and saturated fat intake**
- 3) Increased alcohol intake**
- 4) Smoking**
- 5) Psychological and environmental stressors**
- 6) Old age**

Clinical manifestation:

- 1) It can be asymptomatic**
- 2) When symptoms appear, they usually indicate vascular damage with specific manifestations related to the organ systems served by the involved vessels**
- 3) Coronary artery disease with angina**
- 4) Left ventricular hypertrophy**
- 5) Left ventricular failure**
- 6) Pathologic changes in the kidneys may be manifested by nocturia**
- 7) Cerebral vascular involvement as stroke or transient ischemic attack**

Diagnostic evaluation:

- 1) Thorough history and physical examination**
- 2) Retinas are examined**
- 3) Laboratory studies are performed to detect possible damage to organs as kidneys or heart**
- 4) Electrocardiography**
- 5) Urine analysis**

Management:

Goal: To achieve and maintain an arterial blood pressure below 140/90 mm Hg whenever possible.

Nonpharmacologic approaches:

- 1. Weight reduction**
- 2. Restriction of sodium, tobacco and alcohol**
- 3. Exercise**
- 4. Relaxation**

Medications:

- 1) Diuretics
- 2) Beta blockers

Nursing management:

1- Assessment:

- 1) Monitor blood pressure at frequent intervals then at routine schedule intervals.
- 2) Nosebleeds

3) Anginal pain

4) Shortness of breath

5) Alteration in vision

6) Vertigo, headache

7) Rate and rhythm of apical and peripheral pulse

2. Nursing diagnosis:

- 1) Knowledge deficit regarding the relationship between the treatment regimen and control of the disease process**
- 1) Potential noncompliance to the self-care program related to side effects of prescribed therapy**

3- Planning and intervention:

Goal: Understanding the disease process and its treatment, compliance with the self-care program, and absence of complication

Patient education for self-care:

- 1) Administer anti-hypertensive drug as prescribed**
- 2) Restrict sodium and fat**
- 3) Control weight**
- 4) Follow an Exercise program**
- 5) Regular follow up**
- 6) Control smoking**
- 7) Self monitoring of blood pressure.**

Thank you