

ACTIVE LEARNING TEMPLATE: *System Disorder*

STUDENT NAME _____

DISORDER/DISEASE PROCESS Hypertension

REVIEW MODULE CHAPTER _____

Alterations in Health (Diagnosis)

Hypertension

Pathophysiology Related to Client Problem

Multifactorial pathogenesis that involves possible interaction between genetic predisposition, excess dietary salt intake, and adrenergic tone.

Health Promotion and Disease Prevention

Risk factor modification

ASSESSMENT

Risk Factors

Essential hypertension
Modifiable: Obesity, stress, excessive salt intake, lack of magnesium and potassium, ethanol overdose, smoking
Non-Modifiable:
Positive family history, insulin resistance, age, sex, defect of local vasomotor regulation
Secondary hypertension
Secondary to some distinct disease (renal, hormonal, neurologic etc)

Expected Findings

Elevated BP with a systolic pressure (SBP) of 140 mm Hg or higher and diastolic pressure (DBP) of 90mm Hg or more

Laboratory Tests

Complete blood count
Uric acid and urine microalbumin

Diagnostic Procedures

Accurately measuring the patient's blood pressure
Performing a focused medical history and physical examination
ECG
Chest radiography

SAFETY CONSIDERATIONS

Making correct and prompt diagnosis
Prompt initiation of therapy
Appropriate prescription and use of medication
Continuous cardiac monitoring during non-pharmacologic interventions especially during physical exercise

PATIENT-CENTERED CARE

Nursing Care

Patient education
Follow up care after initiation of therapy
Administration of medication
Preparation of the patient for diagnostic and therapeutic procedures

Medications

1) Diuretics
2) Sympatholytics
3) Vasodilators
4) Inhibitors of the renin-angiotensin system

Client Education

Lifestyle modification
Appropriate long-term use of anti-hypertensive drugs

Therapeutic Procedures

Renovascular hypertension:
1)Aortorenal bypass using saphenous vein graft
2)Renal artery angioplasty with stenting
Tumor resection in hypertensive patients with pheochromocytoma and r unilateral solitary aldosterone-producing adenoma

Interprofessional Care

Cardiac rehabilitation
Multi-disciplinary management of underlying diseases

Complications

Ischemic heart disease
Coronary artery disease
Heart failure
Chronic kidney disease
Stroke