



SNS COLLEGE OF NURSING COIMBATORE-35

**PROGRAMME
COURSE**

**: B.Sc. Nursing IV Year
: Midwifery & Obstetrical
Nursing**

**UNIT
TOPIC**

**: V
: Antihypertensive drugs**

PREPARED BY

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OBJECTIVES

To identify appropriate nursing assessments, nursing interventions and treatment options used to certain women who develops obstetric complications like a hypertension during pregnancy.

INTRODUCTION

- Patient Profile:

A pregnant woman at 38 weeks gestation with chronic hypertension who develops signs of superimposed preeclampsia.

- Symptoms:

Severe headache, blurred vision, and extremely high blood pressure (e.g., 200/150 mmHg). Lab Findings:

Heavy proteinuria on a urine dipstick (4+) indicates significant kidney involvement.

- Management:

Prompt and timely intervention is crucial to avoid serious maternal and fetal complications. **GUESS THE CONDITION**

DEFINITION

Antihypertensive drugs are medications that lower high blood pressure (hypertension) by influencing the body's physiological responses in various ways, such as removing excess fluid and salt, relaxing and widening blood vessels, or slowing the heart rate.



CLASSIFICATION

Alpha and Beta blockers-Labetalol hydrochloride

Calcium channel blockers-Nifedipine

Alpha blockers-Methyldopa

Vasodilators-Hydralazine hydrochloride



LABETALOL

Preparation:

Injection-5mg/ml in 20ml vial

Tablets-100mg, 200mg, 300mg

Action:

Reduced peripheral vascular resistance as a result of alpha and beta blockade.

Indications:

Hypertension

Hypertensive emergencies.





LABETALOL

Contraindications

Hypersensitive to drug or its component.

Bronchial asthma

Hepatic or heart failure

Prolonged hypotension

Severe bradycardia

NURSING CONSIDERATIONS

Advise patient to remain in supine position for 3 hrs after infusion.

Monitor BP frequently.

Continuous Fetal monitoring

In diabetic patient monitor glucose level closely.

Advise patient that dizziness can be minimized by rising slowly and avoiding sudden position change.

NIFIDIPINE

Preparations:

Capsule-10 mg, 20 mg

Action:

Direct arteriolar vasodilatation. It is thought to inhibit calcium ion reflex across cardiac and smooth muscle cells, decreasing contractility and oxygen demand and also dilates arteries and arterioles.

EFFECTS AND DOSAGE

Dizziness

Syncope

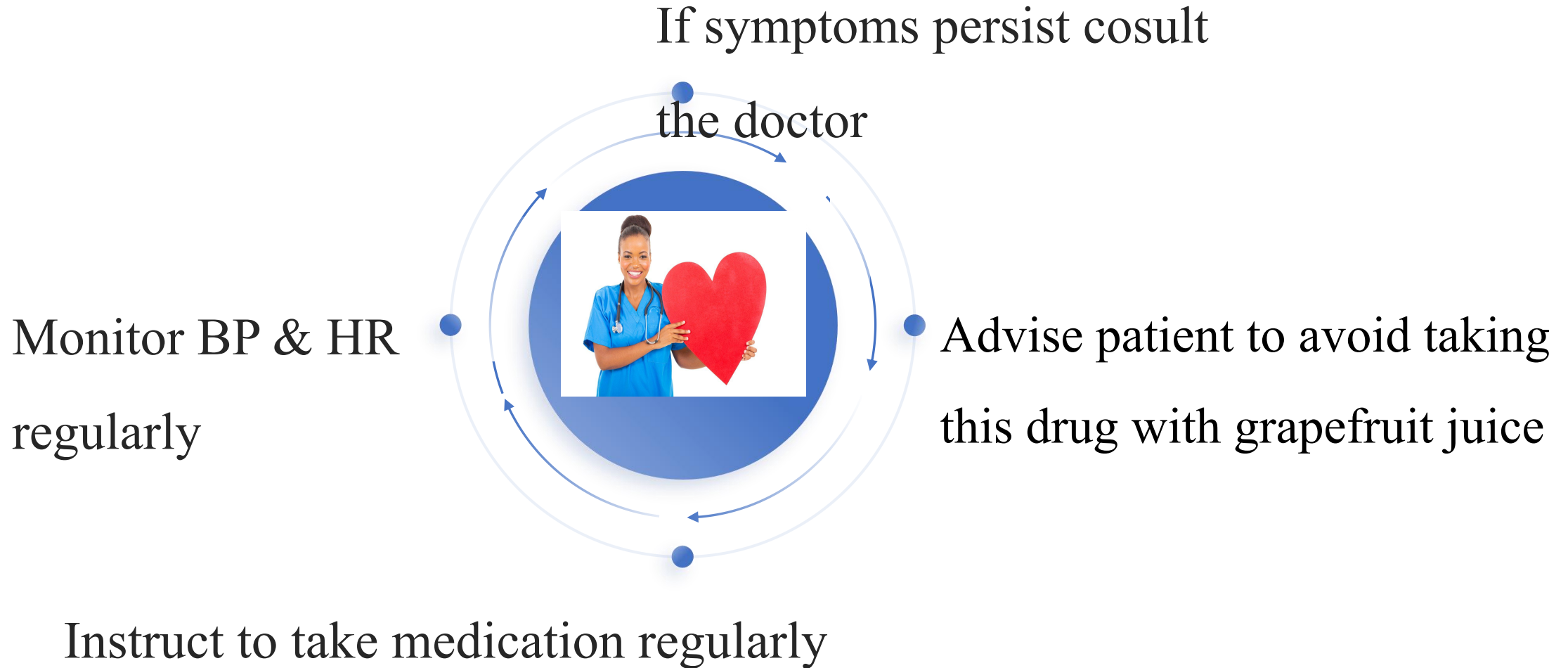
Heart failure

Muscle
cramps

Peripheral
edema

5-20 mg TID
orally

NURSING CONSIDERATIONS



METHYL DOPA

Preparations:



Tablet - 250 mg, 500 mg



Action: Central and peripheral
anti-adrenergic action

Indications:



Eclampsia



Chronic hypertension



METHYL DOPA

Adverse effects:

Decreased mental acuity

Sedation

Headache or depression

Bradycardia

Hepatic necrosis

Hepatitis

NURSING CONSIDERATIONS

Monitor BP
regularly

Monitor patient
Coomb's test results.

Your title here

Report for involuntary
movements.

Tell patient to check
weight daily and
noins more than 2 kg
in a week.

HYDRALAZINE HYDROCHLORIDE

Tablet - 10 mg, 25 mg, 50 mg,
100 mg

01

Contraindications:

Coronary artery disease
Rheumatic heart disease
Severe renal impairment

06

Orally: 100 mg/day in 4
divided doses.

05

Action:

Arterial vasodilator. Direct acting on
peripheral vessels that relaxes arteriolar
smooth muscle

02

Adverse Effects:

Neutropenia
Leukopenia
Thrombocytopenia
Orthostatic hypotension

03

Monitor patient BP, pulse rate, body weight
frequently

Monitor patient for muscle and joint pain, fever
or throat pain.

04

CONCLUSION

Antihypertensive therapy during pregnancy effectively reduces the risk of severe hypertension and some adverse pregnancy outcomes, such as preeclampsia and preterm birth, without significantly increasing the risk of small-for-gestational-age (SGA) infants.

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THANK YOU

