

## Gestational Hypertension

Gestational hypertension, also called pregnancy-induced hypertension (PIH), is the development of new-onset hypertension during pregnancy without proteinuria or evidence of end-organ damage. It most commonly presents after 20 weeks gestation. Risk factors include nulliparity, obesity, African American race, age over 35 years old, multiple gestations and family history. Some complications of this disease are intrauterine growth restriction (IUGR), prematurity, and placental abruption. Treatment is with obstetric approved hypertensive medications like -methyldopa, -blockers like labetalol, calcium channel blockers, and hydralazine.



PLAY PICMONIC

### New-Onset Hypertension

#### On-switch Hiker-BP

To be diagnosed with gestational hypertension, patients cannot have a past diagnosis of hypertension, and must have blood pressure above 140/90 mmHg. In addition, the patient must not have evidence of end-organ damage or proteinuria- as this indicates preeclampsia.

### > 20 Weeks Gestation

#### Greater-than (20) Dollar-bill and Weekly-newspaper

Gestational hypertension occurs after 20 weeks gestation and may continue into the postpartum period, but usually self-resolves after delivery.

### Risk Factors

#### Nulliparity

##### Empty-cradle

First time mothers are at higher risk than multiparous mothers for gestational hypertension.

#### Obesity

##### Obesity

Women who are obese prior to pregnancy are at higher risk for gestational hypertension.

#### African American Females

##### African American with Female Sex-symbol

The Black population has a higher incidence of essential (primary) hypertension as well as gestational hypertension.

### > 35 years Old

#### Greater-than 35-mm Camera

Increasing age over 35 years old is associated with higher risk for gestational hypertension.

### Multiple Gestations

#### Twins

With multiple gestation pregnancies, mothers are at high risk for developing gestational hypertension.

## Family History of Gestational HTN (or Preeclampsia)

### Family Hx and Pregnant-woman with Hiker-BP

Gestational hypertension and preeclampsia have familial components to them, so any mothers with family history should be closely monitored for developing either condition.

## Complications

### IUGR

#### Restrictive-belt on Uterus

Intrauterine growth restriction (IUGR) refers to any process that causes fetal weight to be in the bottom tenth percentile for gestational age. Pregnancy-induced hypertension may contribute to IUGR of the fetus.

### Prematurity

#### Incubator

Any birth that occurs prior to 37 weeks gestation is referred to as premature. Mothers with gestational hypertension are more likely to deliver prematurely.

### Abruptio Placentae

#### Erupting Placenta-present

Placental abruption happens when the placenta separates from the uterine wall prematurely; it may cause massive hemorrhage and fetal death. Mothers with gestational hypertension are at increased risk for this life-threatening condition, which is an indication for emergency C-section.

## Management

### Fetal Monitoring

#### Fetus and Monitor

A developing fetus can be monitored with fetal heart rate tracings, non-stress tests, contraction stress tests and biophysical profiles. As fetuses born to mothers with gestational hypertension are at increased risk for complications, close monitoring may be indicated.

### Alpha-Methyldopa

#### Afro Metal-dough-boy

Classified as an alpha-2 agonist, this medication works by decreasing sympathetic outflow in an effort to decrease blood pressure. Although it is safe to use during pregnancy, it is generally not effective, and carries side effects such as lupus-like syndrome and immune-mediated hemolytic anemia.

### Beta-Blockers (Labetalol)

#### Beta-fish with Blocks

Beta-blockers, like labetalol, are commonly used to treat gestational hypertension. They can be administered in PO or IV forms.

### Calcium Channel Blockers

#### Calcium-cow Channel with Blocks

Dihydropyridine calcium channel blockers, such as nifedipine and amlodipine, are commonly used to treat gestational hypertension.

### Hydralazine

#### Hydra-laser

Most often reserved for hypertensive emergencies, hydralazine is a fast-acting arteriolar vasodilator that rapidly drops blood pressure. It is safe for pregnancy, but may cause a lupus-like syndrome, reflex tachycardia, fluid retention and headache.