

## Factors Contributing to the Development of Pregnancy-Induced Hypertension: An Opinion

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### DESCRIPTION

Pregnancy-induced Hypertension (PIH), also known as gestational hypertension, is a condition characterized by high blood pressure that develops during pregnancy, typically after the 20<sup>th</sup> week of gestation. This condition, which affects approximately 6-8% of pregnant women globally, can have significant implications for both maternal and fetal health. The causes, symptoms, risks, management strategies, and potential outcomes linked to pregnancy-induced hypertension has been affected pregnancy period. Pregnancy-induced hypertension is often asymptomatic in its early stages, making regular prenatal check-ups important for early detection. The exact cause of pregnancy-induced hypertension remains unclear, but several factors are believed to contribute to its development.

### Causes and risk factors

These include genetic predisposition, placental abnormalities and immune system responses. Key risk factors for PIH include:

**First-time pregnancy:** Women experiencing their first pregnancy are at higher risk.

**Multiple pregnancies:** Carrying twins, triplets or more increases the risk.

**Age:** Women under 20 or over 40 are more susceptible.

**Obesity:** Overweight women are at a higher risk.

**Pre-existing conditions:** Conditions such as chronic and acute hypertension, diabetes and kidney disease can predispose women to PIH.

**Family history:** A family history of PIH or preeclampsia can increase risk.

### Symptoms and diagnosis

When symptoms do occur, they may include:

**High blood pressure:** A reading of 140/90 mmHg or higher on two separate occasions.

**Proteinuria:** Presence of excess protein in the urine, a sign of kidney involvement.

**Edema:** Swelling, particularly in the hands, feet and face.

**Severe headaches:** Persistent headaches that do not respond to typical treatments.

**Visual disturbances:** Blurred vision or sensitivity to light.

**Upper abdominal pain:** Often under the ribs on the right side.

Diagnosis is typically made through regular blood pressure monitoring and urine tests during prenatal visits. Additional tests, such as blood tests and ultrasound scans, may be conducted to assess the health of both mother and fetus.

### Risks and complications

If left untreated, pregnancy-induced hypertension can lead to serious complications, including:

**Preeclampsia:** A more severe form of hypertension characterized by damage to organs such as the liver and kidneys.

**Eclampsia:** The onset of seizures in a woman with preeclampsia, which can be life-threatening.

**Hemolysis, Elevated Liver enzyme levels and Low Platelet levels (HELLP) syndrome:** A severe condition involving hemolysis (destruction of red blood cells), elevated liver enzymes and low platelet count.

**Placental abruption:** Premature separation of the placenta from the uterus, which can deprive the baby of oxygen and nutrients.

**Preterm birth:** Delivering the baby before 37 weeks of gestation.

**Lowbirth weight:** Babies born to mothers with PIH are at risk of being smaller than average.

**Intrauterine Growth Restriction (IUGR):** Reduced growth rate of the fetus during pregnancy.

### Management and treatment

Effective management of pregnancy-induced hypertension involves close monitoring and, in some cases, medical intervention. Key strategies include:

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**Regular prenatal visits:** Frequent check-ups to monitor blood pressure and fetal development.

**Lifestyle modifications:** Maintaining a healthy diet, reducing salt intake and engaging in moderate exercise can help manage blood pressure.

**Medication:** Antihypertensive medications may be prescribed to control blood pressure. Commonly used medications include methyldopa, labetalol and nifedipine, which are considered safe for use during pregnancy.

**Hospitalization:** Severe cases may require hospitalization for closer monitoring and immediate medical intervention if necessary.

In cases where PIH progresses to preeclampsia or other severe conditions, early delivery of the baby may be considered to prevent further complications. This decision is based on the gestational age of the fetus, the severity of the condition and the overall health of the mother and baby.

## CONCLUSION

Pregnancy-induced hypertension is a significant health concern that requires careful monitoring and management to ensure the safety of both mother and baby. The prognosis for women with pregnancy-induced hypertension varies depending on the severity of the condition and the effectiveness of management strategies. In many cases, blood pressure returns to normal within a few weeks postpartum. However, women who experience PIH are at increased risk of developing chronic hypertension and cardiovascular diseases later in life.

With regular prenatal care, appropriate lifestyle modifications, and timely medical intervention, the risks associated with PIH can be minimized, leading to better health outcomes for both mother and child. As study continues to evolve, a deeper understanding of the condition will hopefully lead to more effective prevention and treatment strategies, further improving maternal and pediatric health worldwide.