

Hypertensive Disorders during Pregnancy



What is Hypertensive Disorders during Pregnancy?

- Hypertensive disorders during pregnancy are pregnancy-associated hypertension.
- They begin during or after pregnancy, including gestational hypertension, pre-eclampsia and eclampsia.
- Evidence shows that hypertensive disorders during pregnancy affect 5-10% of pregnancies.

Risk Factors

- Prior pre-eclampsia
 - Chronic hypertension
 - Underlying renal disease
 - Diabetes Mellitus
 - Antiphospholipid syndrome
 - Systemic Lupus Erythematosus
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- Multiple gestation
 - Maternal BMI >30
 - Advanced maternal age
 - Assisted reproduction therapies



Complications and Treatment of Hypertensive Disorders during Pregnancy

<u>Disorder</u>	<u>Complications</u>	<u>Screening, Monitoring and Treatment</u>
Gestational Hypertension Persistent hypertension that develops at or after 20 weeks' gestation in the absence of features of pre-eclampsia.	<ul style="list-style-type: none">• Blood flow to baby hindered, affecting baby's growth• Pre-eclampsia and cardiovascular disease (long-term) may develop	<ul style="list-style-type: none">• Blood and urine tests• Ultrasound scans• Blood pressure medication (safe for mother/baby)
Pre-eclampsia Pre-eclampsia is gestational hypertension accompanied by proteinuria and/or maternal organ dysfunction at or after 20 weeks' gestation.	<ul style="list-style-type: none">• Eclampsia• Impairment of mother's kidneys/liver, heart• Placental abruption• Fetal growth restriction• Hemolysis, elevated liver enzymes, low platelets	<ul style="list-style-type: none">• Blood and urine tests• Ultrasound scans,• Blood pressure medications• Aggressive monitoring• Worse cases may include caesarean section
Eclampsia Eclampsia is when a person with preeclampsia develops seizures (convulsions) during pregnancy.	<ul style="list-style-type: none">• Severe/persistent headaches• Vision changes• Upper abdominal pain• Mental confusion	<ul style="list-style-type: none">• Blood and urine tests• Ultrasound scans,• Blood pressure medications• Anti-seizure medications• Aggressive monitoring• Caesarean section

Prevention of Hypertensive Disorders during Pregnancy



HEALTHY DIET

Plant-based diet, intake of essential nutrients



REGULAR EXERCISE

Regular aerobic exercise, 150min of moderate-intensity per week



HEALTHY SLEEPING HABITS

Adequate sleep to manage stress levels



DOCTOR'S PRESCRIPTIONS

Low-dose aspirin, calcium supplementation, etc.

- Leeman, L., Dresang, L. T., & Fontaine, P. (2016). Hypertensive Disorders of Pregnancy. *American family physician*, 93(2), 121-127.
- Brown, M. A., Magee, L. A., et al (2018). Hypertensive disorders of pregnancy. *Hypertension*, 72(1). <https://doi.org/10.1161/hypertensionaha.117.108803>
- <https://www.myheart.org.sg/heart-news/pregnancy-blood-pressure/>