High Blood Pressure in Pregnancy

Information for patients who have been diagnosed with hypertension in pregnancy.

Definitions

Health care providers use many words to describe different types of high blood pressure diseases. Following are some of the most common terms.

Type	Definition
Transient or non-persistent high blood pressure	A single blood pressure measurement is high, but repeat measurement is normal
White coat syndrome or white coat hypertension	Blood pressure is high in the physician's office or other clinical settings but normal at other times
Hypertension	High blood pressure on more than one measurement, either on different days or at least several hours apart
Chronic hypertension	Hypertension that was present before pregnancy or before 20 weeks of pregnancy
Gestational hypertension*	Hypertension first seen after 20 weeks of pregnancy
Preeclampsia*	Gestational hypertension plus abnormalities in at least one body organ system, such as kidney, liver or brain, or blood-clotting factors
Eclampsia*	Seizure (epileptic fit) in a pregnant person with no history of seizure or no known brain injury to explain a seizure. It is usually associated with preeclampsia but may occur without high blood pressure.
HELLP syndrome*	A severe form of preeclampsia with a combination of several abnormalities of blood cells and liver enzymes
* Hypertensive diseases of pregnancy	Any of the types above that are marked with an asterisk (*)

This handout is mainly concerned with hypertensive diseases of pregnancy, but some of the contents are also relevant for chronic hypertension.

Why Did I Get High Blood Pressure?

We do not know all the causes of high blood pressure. Many factors increase the chances of having hypertensive diseases of pregnancy, including:

- High-risk factors: Hypertension in a prior pregnancy, twin pregnancy, diabetes, kidney disease and some autoimmune diseases
- Moderate-risk factors: First pregnancy, age over 35, obesity, in vitro fertilization, Black ethnicity, family history of hypertension, low income

Only some people with these risk factors get high blood pressure. Some people get high blood pressure even though they don't have any risk factors.

Management of Hypertensive Diseases of Pregnancy

Management options depend on a careful evaluation of several questions, such as:

- **What type of hypertension is it?** — To determine which type of hypertension is present, your physician will order a urine test to see if your kidneys are leaking protein and blood tests to check your liver and blood cell counts.
- **Is the condition severe?** — Hypertensive diseases are considered "severe" when any of these occurs:
  - Very high blood pressure (upper number 160 or more or lower number 110 or more)
  - Eclampsia (seizure)
  - Very low blood platelets (less than 100,000)
  - Elevated liver enzyme blood tests (twice as high as normal)
  - Kidney not functioning well (blood creatinine 1.2 or more)
  - Fluid in lungs
  - New onset unexplained severe headache that does not get better with medicine
  - Disturbances in vision
- **Is it getting worse, and if so, how fast?** — The answer to this question requires blood pressure follow up over hours, days or weeks. Sometimes follow-ups of urine tests and blood tests are needed.
- **Should the pregnancy be continued or delivered?** — The decision to deliver involves a trade-off of risks to the pregnant person versus risks to the baby. Hypertensive diseases of pregnancy usually get worse over time, so the lowest risk for the pregnant person is to deliver as soon as the problem is discovered. Premature delivery carries risks to the baby.

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These risks are highest at very early gestational ages and gradually decrease as the pregnancy approaches the due date. Timing of delivery for hypertensive diseases of pregnancy will depend on your circumstances, but will often follow these general guidelines:

  - 37 weeks or more: Delivery is usually recommended
  - 34 weeks or more: Delivery is recommended for severe hypertensive disease
  - Before 34 weeks: Delivery is recommended for severe hypertensive disease that is getting worse

For chronic hypertension, delivery timing depends on whether your blood pressure is well-controlled and blood pressure medications are being used.

- **Can hypertensive diseases of pregnancy be treated with medications?** — Medications are often used to reduce blood pressure. But lowering the blood pressure does not prevent or treat abnormalities in organs, such as kidneys, liver or brain, or blood clotting. Magnesium helps reduce the chance of a seizure in severe cases. Magnesium does not reduce blood pressure.

Will My Blood Pressure Improve After Pregnancy?

For most people with hypertensive diseases of pregnancy, blood pressure and other organ changes will return to normal within a few weeks after delivery. Some patients will need medication to reduce blood pressure during this time.

For people with chronic hypertension and some with hypertensive diseases of pregnancy, blood pressure remains high and long-term medication is needed to reduce blood pressure.

Even if your blood pressure returns to normal soon after delivery, it may rise again after you get home. For this reason, blood pressure follow up is essential. Even if your blood pressure returns to normal, patients who had high blood pressure during pregnancy, even if it was not severe, have an increased chance of developing heart conditions, stroke, kidney disease, diabetes and other complications in the future, sometimes years or even decades later.

What Follow-Up is Needed After Delivery?

With severe hypertension, the American College of Obstetricians and Gynecologists recommends that you be seen for a follow-up visit within 72 hours after discharge from the hospital. For non-severe hypertension, follow-up within seven to 10 days is recommended.

Everyone who has had hypertension during pregnancy should establish care with a primary care provider and inform the provider that they have had hypertension during pregnancy. Usually, the primary care provider should screen for risk factors for cardiovascular (heart) disease every year, including checking blood pressure, cholesterol, lipids and a diabetes screen.

Will I have Hypertensive Disease in Future Pregnancies?

Preeclampsia and gestational hypertension recur in about 30% of cases (one in three). The odds of recurrence are higher if you had a preterm delivery or severe preeclampsia. Low-dose aspirin reduces the odds of recurrence. Ask your provider if you should take aspirin during your next pregnancy.

Which Urgent Warning Signs Need Attention?

High blood pressure is sometimes called a “silent killer” because it may not produce any symptoms. If you are taking your blood pressure at home, notify your provider immediately if you get a value of 160 or higher (upper number) or 110 or higher (lower number). The following symptoms may indicate severe disease, whether or not blood pressure is high and whether you are still pregnant or have already delivered. Notify your provider right away if you have any of the following symptoms:

- Headache that won’t go away or that gets worse over time
- Changes in your vision
- Unexplained pain in your upper abdomen (belly)
- Unexplained shortness of breath

Additional Resources:

Centers for Disease Control and Prevention
cdc.gov/bloodpressure/pregnancy.htm

Mayo Clinic
mayoclinic.org/healthy-lifestyle/pregnancy-week-by-week/in-depth/pregnancy/art-20046098

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