

Pre-eclampsia

Overview:

- Preeclampsia is a dangerous pregnancy complication characterized by high blood pressure, severe swelling and excess protein in the urine.
- Preeclampsia usually begins after 20 weeks of pregnancy and sometimes it may develop up to six weeks after delivery. This condition affects both mother and fetus.
- Preeclampsia sometimes develops without any symptoms, for this reason it is important to maintain regular checkups.
- The only effective treatment for preeclampsia is delivery, unless it is too early in the pregnancy.
- It is crucial to maintain regular check-ups during pregnancy to prevent preeclampsia and control it.

Introduction:

Preeclampsia is a condition that pregnant women develop and it affects both the mother and fetus. It usually begins after 20 weeks of pregnancy or in some cases after delivery. Preeclampsia is a pregnancy complication characterized by high blood pressure and signs of damage to other organs. Although preeclampsia and high blood pressure may be linked but they are two different conditions.

Preeclampsia usually begins after 20 weeks of pregnancy in women whose blood pressure had been normal.

Other names :

Toxemia, Gestational hypertension plus proteinuria.

Cause :

The exact cause of preeclampsia is still unknown, however there is a consensus that it begins in the placenta (the organ that nourishes the fetus throughout pregnancy). Early in the pregnancy, new blood vessels develop and evolve to efficiently send blood to the placenta. In women with preeclampsia, these blood vessels don't develop or function properly. They're narrower than normal blood vessels and react differently to hormonal signaling, which limits the amount of blood that can flow through them.

Risk factors:

- Advanced age.
- Family history.
- History of preeclampsia in previous pregnancies.
- Suffering from chronic diseases (e.g. Hypertension, diabetes, and kidney disease).
- First pregnancy.
- Obesity.
- Polycystic ovary syndrome.
- Multiple pregnancy (twins, triplets).
- Sickle cell anemia.
- Autoimmune Diseases (e.g. Lupus, Rheumatoid arthritis, and Multiple sclerosis).

Symptoms:

Preeclampsia sometimes develops without any symptoms. Monitoring the mother's blood pressure is an important part of prenatal care because the first sign of preeclampsia is commonly a rise in blood pressure. Other signs and symptoms of preeclampsia may include:

- Excess protein in your urine (proteinuria).
- Severe headaches.
- Changes in vision.
- Swelling in the hands, feet, or face especially around the eyes.
- Upper abdominal pain, (usually under the ribs on the right side).
- Nausea or vomiting.
- Decreased urine output.
- Impaired liver function.
- Shortness of breath.
- Sudden weight gain.

When to see a doctor:

Consult your doctor immediately if you notice developing signs and symptoms of preeclampsia especially:

- Severe headache.
- Vision changes.
- Severe abdominal pain.
- Shortness of breath.

Diagnosis:

- Medical history:
- Family history.
- Laboratory tests: Blood and urine tests, to check liver and kidney function and measure the amount of protein in your urine.
- Other tests: Ultrasound scans

Complications:

- Eclampsia (the onset of seizures (convulsions) in a woman usually after 20 weeks of pregnancy).
- Fetal growth restriction, and low birth weight.
- HELLP syndrome. (a serious complication in pregnancy characterized by haemolysis (the destruction of red blood cells), elevated liver enzymes and low platelet count occurring late in the pregnancy).
- Preterm birth.
- Kidney failure.
- Cirrhosis.
- Placental abruption.
- Stroke.
- Cardiovascular disease.
- Death.

Treatment:

The only effective treatment for preeclampsia is delivery, but of course, if it's too early in the pregnancy, delivery may not be the best thing for the baby. In that case possible treatment options for preeclampsia may include:

- Medication to lower blood pressure.
- Corticosteroids.
- Magnesium sulfate.
- Anticonvulsant medications (If your preeclampsia is severe).

Prevention:

Researchers continue to study ways to prevent preeclampsia, but so far, no clear strategies have emerged. It is crucial for all pregnant women to maintain regular check-ups during and after pregnancy. However, in certain cases when a woman meet a number of risk factors, preeclampsia risk can be reduced by taking low-dose aspirin (75- 80 milligrams) once a day beginning after 12 weeks of pregnancy, in addition to controlling some factors contributing to hypertension by:

- Maintaining a healthy weight.
- Managing chronic diseases.
- Limiting your salt intake.
- Avoiding fried and fast food.
- Getting sufficient rest.
- Exercising regularly.
- Elevating your feet several times during the day.
- Avoiding beverages that contain caffeine.

Frequently Asked Questions:

- **Does suffering from preeclampsia in a previous pregnancy mean you will develop it again in a subsequent pregnancy?**

Once you're pregnant, it is advisable to visit your doctor regularly and undergo all the necessary pregnancy tests. However, if your condition was advanced in your previous pregnancy resulting in preterm birth (before 34 weeks), then the risk of developing pre-eclampsia in a subsequent pregnancy increases. This also applies to developing pre-eclampsia due to obesity, which also increases your chances of developing it in the next pregnancy.

Misconceptions:

- **Consuming fish oil or garlic prevents pre-eclampsia.**

Truth: Researchers continue to study ways to prevent preeclampsia, but so far, no clear strategies have emerged.

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