

Preeclampsia: Protecting Maternal and Fetal Health

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DESCRIPTION

Pregnancy can also come with potential health risks for both the mother and the unborn baby. One such complication that affects approximately 5%-8% of pregnancies worldwide is preeclampsia. Preeclampsia is a disorder in which blood pressure increases and causes damage to organs, usually occurring after 20 weeks of gestation [1,2].

Preeclampsia is a complex condition that affects multiple systems in the body, particularly the cardiovascular and renal systems. It is characterized by high blood pressure (hypertension) and the presence of protein in the urine (proteinuria), which are often accompanied by other organ dysfunctions [3,4].

Causes and risk factors

The exact cause of preeclampsia is still unknown, but several factors contribute to its development. These include:

Placental factors: Problems with the development and function of the placenta, such as insufficient blood flow and abnormal implantation may play a role in preeclampsia.

Genetics: A family history of preeclampsia increases the risk of developing the condition.

First-time pregnancy: Preeclampsia is more common in first-time pregnancies suggesting that immunological factors may contribute to its onset.

Age and medical conditions: Women over the age of 35, those with pre-existing hypertension, diabetes, kidney disease, or obesity, have a higher risk of developing preeclampsia.

Signs and symptoms

Recognizing the signs and symptoms of preeclampsia is crucial for early detection and intervention [5,6]. While some women may not experience any noticeable symptoms, while some common symptoms include:

High blood pressure (hypertension): Blood pressure readings consistently above 140/90 mmHg.

Proteinuria: The presence of excess protein in the urine.

Swelling: Edema, particularly in the hands, face, and legs, may occur due to fluid retention.

Headache: Persistent headache that is not relieved with usual remedies.

Visual disturbances: Blurred vision, light sensitivity, or temporary loss of vision.

Abdominal pain: Pain in the upper right abdomen, below the ribs, may indicate liver involvement.

Decreased fetal movement: Reduced fetal movements compared to usual patterns.

Complications and effects on mother and infant

If left untreated, preeclampsia can lead to severe complications for both the mother and the infant [7]. Some of the potential risks include:

Eclampsia: Preeclampsia can progress to eclampsia, which involves seizures or convulsions. This is a life-threatening condition that requires immediate medical attention.

Organ damage: Preeclampsia can affect multiple organs, such as the liver, kidneys, lungs, and brain, leading to organ dysfunction and potential long-term health issues.

Placental abruption: The separation of the placenta from the uterus before delivery can occur, leading to severe bleeding and decreases the baby's oxygen supply.

Fetal growth restriction: Preeclampsia can disrupt the flow of nutrients and oxygen to the infant, resulting in restricted fetal growth and low birth weight.

Preterm birth: Due to the risks posed by pre-eclamps, healthcare providers may recommend delivering the infant early to protect the mother's health.

Management and treatment

Proper management and treatment of preeclampsia are essential to reduce the risk of complications [8]. Some common approaches include:

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Regular monitoring: Pregnant women at high risk or with early signs of preeclampsia require close monitoring of blood pressure, urine protein levels, and fetal well-being.

Medications: Medications may be prescribed to manage high blood pressure and prevent seizures.

Rest: Bed rest, reduced physical activity, and proper self-care, including adequate hydration and balanced nutrition, are often recommended.

Delivery: Depending on the severity of preeclampsia and gestational age, delivery may be recommended to ensure the safety of both mother and baby [9,10].

CONCLUSION

Preeclampsia is a serious condition that poses significant risks to both mother and baby. Early detection, regular prenatal care, and proper management are crucial for minimizing complications associated with preeclampsia. It is essential for expectant mothers to be aware of the signs and symptoms of preeclampsia and promptly report any concerns to their healthcare provider. Through timely intervention and appropriate medical care, the risks associated with preeclampsia can be mitigated, allowing for healthier outcomes for both mother and baby.

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