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Role of Dietary Management to Cure Gestational Hypertension

Parvati^{*}, Kalpna Gupta and Shraddha Saroj

Dept. of Home Science, Banaras Hindu University, Varanasi, Uttar Pradesh (221 005), India



Corresponding Author

Parvati e-mail: parivashu39@gmail.com

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E-mail: bioticapublications@gmail.com



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Abstract

If the prevalence of hypertension in women aged 20–44 years is 7.7%. Gestational hypertension in women aged 20–44 years is 7.7%. Gestational hypertension disorders include gestational hypertension, typically defined as new onset hypertension (>140 mm-hg systolic or >90 mm-hg diastolic blood pressure) arising after 20 weeks' gestation, and Preeclampsia is defined as gestational hypertension induced by proteinuria. Treatment strategies should be low in sodium and fat in consultation regarding chronic hypertension, medication adjustments, and pregnancy hypertension. A healthy and balanced diet that includes whole grains and lots of fruits, vegetables, and potassium can help ease your dilemma about what to eat to cure high blood pressure during pregnancy.

Introduction

The incidence of hypertension in women of reproductive age group is increasing day by day globally as well as in India. Hypertensive diseases of pregnancy, a hypnosis that includes established and gestational hypertension, preeclampsia, and eclampsia, complicate pregnancies by up to 10% and prove an important cause of maternal and perinatal morbidity and mortality. High blood pressure occurs in United States in 6–8% of pregnancies, citing the report of the group working on the National Hypertension Education Program on hypertension in pregnancy. High blood pressure or high blood pressure is a long-term medical condition in which the blood pressure in the arteries is constantly increased.

Gestational hypertension or pregnancy-induced hypertension is the development of new hypertension in a pregnant woman after 20 weeks, without the presence of protein in the urine or other signs of preeclampsia. Gestational hypertension collapses due to blood pressure above 140/90 on two separate occasions, at least 6 hours apart. High blood pressure during pregnancy can affect the development of the placenta, causing insufficient supply of nutrients and oxygen to the baby. It may act as a major factor for a pre-mature delivery, low birth weight, placental separation (sudden) and other complications for the baby. High blood pressure during pregnancy can adversely affect the mother's body. In addition, high blood pressure can play an important role in increasing complications before and after birth.

High Blood Pressure Categories in Pregnancy

igh blood pressure is the most common medical problem occurring during pregnancy, with 2-3 % of pregnancies reported. Hypertensive disorders during

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pregnancy can be divided into four categories, as suggested by the National Hypertension Education Program Working Group on High Blood Pressure in Pregnancy. High blood pressure and their types may vary in severity and effect in the body. The categories of high blood pressure during pregnancy include:

• **Chronic hypertension:** High blood pressure that is present before pregnancy. Chronic hypertension is a condition that occurs before pregnancy, is diagnosed within the first 20 weeks of pregnancy or is not resolved by a 12-week postpartum check-up.

• Chronic hypertension with exaggerated preeclampsia: Preeclampsia, which develops someone with high blood pressure (high blood pressure before pregnancy).

• Gestational hypertension: Gestational hypertension, formerly known as pregnancy-induced hypertension or PIH, is the new onset of hypertension after 20 weeks of gestation. High blood pressure is noted in the concluding part of pregnancy, but no other signs or symptoms of preeclampsia are present. Some women will develop preeclampsia later, while others may have high blood pressure (chronic hypertension) before pregnancy.

The diagnosis requires that the patient have:

• Elevated blood pressure (systolic >140 or diastolic >90 mm-Hg), the findings measured using the Korotkoff sound (which is the sound of an artery that is heard through a stethoscope applied to the cuff of a sphygmomanometer that is differentcuffs change with pressure. And are used to determine systolic and diastolic blood pressure).

- First Normal Blood Pressure.
- No protein in urine.
- No expression of pre-eclampsia and eclampsia.

• Eclampsia: a result found in half of the termination of pregnancy and hypertension, protein in urine, and generalized inflammation in the mother's body. It can affect other parts of the body and can also cause seizures (eclampsia). Eclampsia is the development of cramps in a pre-existing preeclampsia or it may appear unexpectedly in a patient with minimal elevation pressure and no proteinuria. The exact cause is unknown but brain ischemia and oedema were suggested.

High blood pressure or hypertension is the most common condition that can occur in pregnant women. Hypertension is equivalent to a blood pressure greater than 140/90. It is usually found in the case of pregnancy or carrying multiple children for the first time. Obesity, smoking and drinking are the specific cause of high blood pressure in pregnant women.

Hypertension Measurement

ypertension in pregnancy is defined as at least 4–6 hours on two separate measurements at systolic blood pressure >140 mm-Hg and diastolic blood pressure >90 mm-Hg. Blood pressure measurement should be interpreted in terms of the stage of pregnancy and the expected changes in blood pressure should occur in each trimester. Blood pressure falls during the first and second trimesters at about 20 weeks' gestation, and returns to pre-stage in the third trimester. Women who did not receive regular medical care before pregnancy may be labelled as 'gestational hypertension' based on high blood pressure in the third trimester, when, in fact, they were suffering from hypertension before pregnancy, which the middle of pregnancy was changed during pregnancy. If a woman has gestational hypertension that does not resolve after delivery, she will later be diagnosed as having chronic hypertension. Ambulatory blood pressure monitoring (ABPM) and hyperbaric index have been suggested as alternative methods to diagnose increased blood pressure during pregnancy.

The Diagnosis

Preeclampsia is also known as transient hypertension; gestational hypertension is actually diagnosed retrospectively when the patient does not develop preeclampsia and if the blood pressure returns to normal by the 12-week postnatal visit. Fifty percent of women with gestational hypertension develop preeclampsia between 24 and 35 weeks. Diagnostic monitoring of gestational hypertension mandate increased. Women who tend to have severe gestational hypertension based on degree of blood pressure have higher perinatal outcomes than women with mild preeclampsia, and require similar management to those with severe preeclampsia.

Management of Preeclampsia

Preeclampsia puts both mother and foetus at risk. However, it is a nutritional disorder. The strength of treatment is early recognition and successful delivery to reduce both obstetric and foetal risk. If the pregnancy has ended, the decision is easy: the baby should be delivered. The decision to deliver involves commensurate with the risk of deteriorating preeclampsia against early maturity. Childbirth is generally not indicated for women with mild preeclampsia from 37 to 38 weeks of gestation and should be as long as 40 weeks.

Dietary Management during Pregnancy

A balanced and healthy diet is the only way to fight high blood pressure in the pregnant mother. So we can include the following foods to reduce high blood pressure during pregnancy.



Table 1: Nutrient sources and their various benefits to combat gestational hypertension		
Essential Nutrient	Sources	Their Benefits
Fatty Acids	Chia Seeds Avocado Walnuts Pumpkin Nuts Sunflower Seeds	Essential Fatty Acids help to fight Hypertension
Calcium & Magnesium	Spinach Kale Broccoli Onion Garlic Peas Green beans	They are rich in antioxidants and help to remove free radicals also prevent high blood pressure
Calcium & Magnesium	Low fat milk product Mushroom Tuna & salmon	Vitamin D, the sunshine hormone to regulate the RAAS & help in preventing the incidence of gestational hypertension
Vitamin B12	Fermented milk products like; Natural yoghurt Cheddar cheese	Fermented milk products have some bacterial strains that can lower high blood pressure

Conclusion

A lthough many pregnant women with high blood pressure have healthy children without serious problems, high blood pressure can be dangerous for both the mother and her fetus. Pre-existing, or chronic, hypertensive women are more likely to have some complications during pregnancy than normal blood pressure. However, some women develop high blood pressure while pregnant (often called gestational hypertension). The effects of hypertension range from mild to severe. High blood pressure can damage the mother's kidneys and other organs; it causes low birth weight and early delivery. In the most severe cases, the mother develops preeclampsia or "pregnancy poisoning" - which can threaten the life of both mother and fetus. Hypertension in pregnancy is a common complication of pregnancy and is associated with a significant maternal morbidity and fetal mortality. High blood pressure pregnancy diet should reduce sodium and fat content. A healthy diet that includes whole grains and lots of fruits and vegetables can help ease the dilemma about eating to correct high blood pressure during pregnancy.

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