

ANTIHYPERTENSIVE DRUG THERAPY FOR HYPERTENSIVE DISORDERS IN PREGNANCY

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Hypertension in pregnancy is associated with increased maternal and fetal mortality and morbidity. About 8 % of all pregnancies are complicated with hypertensive disorders. There is concordance that severe hypertension should be treated without delay to reduce maternal risks of acute cerebrovascular complications. Intravenous labetalol and oral nifedipine are as effective as intravenous hydralazine in control of severe hypertension, with less adverse effects. Still, there is no consensus as to whether mild-to-moderate hypertension in pregnancy should be treated, considering that there are no definitive conclusions which can be made about the relative maternal or perinatal benefits/risks of antihypertensive treatment. Considering their safe usage during pregnancy, methyl dopa, labetalol and nifedipine are commonly used blood-pressure lowering drugs for pregnant women with hypertension. The cardio-selective β - blocker atenolol should be avoided in pregnancy, because it has been associated with lower birth weights and fetal growth impairment. ACE inhibitors and angiotensin receptor blockers are contraindicated in pregnancy. *Acta Medica Medianae* 2008;47(3):65-72.

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Hypertensive pregnancy disorders - definitions and classification

Hypertensive disorders are among the most common of all medical complications in pregnancy and are the leading cause of maternal and perinatal morbidity and mortality (1). Approximately, 8% of all pregnancies are complicated by hypertension (2). It was estimated that 192 women die every day because of complications of pregnancy hypertension (3).

Hypertension in pregnancy is defined by systolic blood pressure (sBP) ≥ 140 mmHg and/or diastolic blood pressure (dBP) ≥ 90 mmHg, or by increase in sBP ≥ 30 mmHg, or in dBP ≥ 15 mmHg, from preconception or first trimester blood pressure confirmed by two measuring, 6 hours apart.

There are four major hypertensive disorders in pregnancy, each with specific characteristics. In chronic hypertension, blood pressure (BP) is diagnosed before pregnancy in the first 20 weeks of gestation, or persists 42 days after delivery $\geq 140/90$ mmHg. In transient (now gestational)

hypertension blood pressure $\geq 140/90$ mmHg was established after the 20th week of gestation, and is not associated with proteinuria.

Preeclampsia-eclampsia

Preeclampsia is generally regarded as very important complication of pregnancy which is more dangerous than gestational or chronic hypertension, and is characterised by hypertension, proteinuria (≥ 0.3 g/24 hours) and oedema after the 20th week of gestation. Eclampsia is described as the appearance of generalised convulsion(s) associated with the signs of preeclampsia, or their occurrence within 7 days of parturition, and not caused by epilepsy or other convulsive disorders. Preeclampsia superimposed on chronic hypertension is defined as a condition of hypertension (BP $\geq 140/90$ mmHg) with onset of proteinuria (4,5).

In compliance with the decision of the National High Blood Pressure Education Program Working Group on High Blood Pressure in Pregnancy, the transient hypertension was renamed into gestational hypertension, and presents the condition of increased blood pressure during pregnancy with the absence of preeclampsia at the time of delivery and normalisation of BP during the following 12 weeks after delivery. Also, in the definition of preeclampsia, oedema has been removed as a diagnostic criterion, thus the preeclampsia includes hypertension and proteinuria (6,7).

Australasian Society for the Study of Hypertension in Pregnancy (ASSHP) also presented their common attitude on hypertensive disorders

