

HYPERTENSION IN PREGNANCY: CHALLENGES IN THE MANAGEMENT

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Pregnancy is a cardiovascular and metabolic challenge to the human female body. During pregnancy, systemic vascular resistance and blood pressure decrease, whereas cardiac output and blood volume increase to safeguard an adequate circulation in the utero-placental arterial bed. Hypertensive disorders of pregnancy affect approximately from 5 to 10% of all pregnant women, and are the main contributors of maternal and neonatal morbidity and mortality worldwide. Hypertension in pregnancy includes a wide spectrum of conditions, including pre-eclampsia and eclampsia, pre-eclampsia superimposed on chronic hypertension, chronic hypertension, and gestational hypertension. Endothelial dysfunction, oxidative stress and an exaggerated inflammatory response are features related to hypertensive disorders. To reduce the risk of maternal and foetal complications due to haemodynamic maladaptation, the current management includes rest at home or in the hospital, close monitoring of maternal and foetal signs and symptoms, early start of antihypertensive therapy, and timely delivery regarding maternal and foetal survival chances. Thresholds to initiate blood pressure lowering treatment during pregnancy are 160 mmHg systole or 110 mmHg diastole. Below these thresholds, treatment must be individualized because current evidence does not support aggressive medical interventions. Alpha-methyldopa and dihydropyridine calcium channel blockers are among the recommended antihypertensives. The major goal is to prevent maternal complications without compromising uteroplacental perfusion and fetal circulation. Before an antihypertensive agent is prescribed, the potential risk to the fetus from intrauterine drug exposure should be carefully reviewed.

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