

ESSENTIAL HYPERTENSION AND PREGNANCY

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Hypertension is the most common medical problem encountered in pregnancy and an important cause of maternal and fetal morbidity and mortality. It complicates up to 15% of pregnancies and accounts for nearly a quarter of all antenatal admissions.

Hypertension in pregnancy is diagnosed either from an absolute rise in blood pressure or from a relative rise above measurements obtained at booking. The conventional cut off value of 140/90 mmHg is probably too high because of physiological fall in blood pressure during pregnancy.

Hypertensive disorders of pregnancy can be classified into three types: chronic hypertension, gestational hypertension and pre-eclampsia. The diagnosis of chronic hypertension, usually essential, is based on a known history of hypertension before pregnancy. It complicates 3-5% of pregnancies, but this figure may be higher in the first pregnancies delayed to 30s and 40s. The presence of mild pre-existing hypertension approximately doubles the risk of pre-eclampsia but also increases the risk of placental abruption and growth restriction in the fetus. However, when hypertension is well controlled, such women do well and have outcomes similar to normal ones. Severe chronic hypertension increases the risk of pre-eclampsia up to 46% with resultant raised maternal and fetal risk. Hypertension occurring in the second half of pregnancy in a previously normotensive woman, without significant proteinuria or other features of pre-eclampsia, is termed gestational or pregnancy induced hypertension. It complicates 6-7% of pregnancies and resolves post partum. The risk of superimposed pre-eclampsia is 15-26%. Pre-eclampsia usually occurs after 20 weeks gestation and is a multi-system disorder. It was classically defined as a triad of hypertension, oedema and proteinuria. Modern definition of pre-eclampsia emphasizes gestational hypertension and >0.3 g proteinuria per 24 hours.

Management of hypertension in pregnancy includes pre-pregnancy counselling and antenatal care with general maternal care, Doppler assessment of uterine arteries and fetal surveillance. In mild to moderate hypertension, methyldopa is the first line agent; nifedipine, amlodipine and oral hydralazine are the second line agents, while adrenergic blockers and thiazide diuretics are third line agents. ACE inhibitors and ARBs have to be avoided because of fetotoxicity. Management of severe hypertension includes adequate blood pressure control, often using parenteral agents in intensive care unit, and “expectant” management by trying to prolong pregnancy without unduly risking the mother or fetus.