

INTRODUCTION

Hypertensive disorders complicating pregnancy are common and form one of the deadly triade, a long with hemorrhage and infection.

It has been estimated that, world wide, approximately 50,000 women die each year from pre-eclampsia (*Pourcelot, 1997*).

According to *American College of Obstetricians and Gynecologists (1996)*, hypertensive disorders in pregnancy were classified into : pregnancy-induced, pregnancy-aggravated, chronic and transient hypertension.

During normal pregnancy, there is trophoblastic invasion into the placental spiral arterioles during early second trimester resulting in its dilatation, while in hypertensive patients, there is failure of trophoblastic invasion with subsequent deterioration in placental function and impaired fetal blood flow this result in redistribution of blood flow with preferential flow to brain and decreased flow to kidneys and lungs (*Malcolm, 1992*).

Sonography can reliably and early monitor pregnancy complications of hypertension. A spectrum of ultrasound findings has been described in these patients: intra-uterine growth retardation, oligo-hydromnios, decreased placental thickness, accelerated

placental maturation, placental abruption and fetal demise. This can be done by using corrected (S/D) ratio, as the parameter of doppler evaluation of umbilical artery, while fetal biometry, EFW, biophysical profile, amniotic fluid volume and placental morphologic changes are the parameters of conventional ultrasound study. Early detection of pregnancy complications allows early management and guarding against or lessening the perinatal morbidity and mortality (*Doubilet and Benson, 1995*).