ABSTRACT

Advent of sonography has changed the practice of obstetrics by providing a window to the womb through which the anatomic structure of the fetus can be evaluated. The addition of Doppler flow studies of maternal and fetal vessels has provided a tool where the physiology of the maternal and fetal unit can be assessed. This information can provide the physician with vital information for a subsequent approach to the pregnancy. In normal pregnancy placental trophoblast cells invade the inner third of the myometrium and migrate the entire length of the maternal spiral arteries. Remodelling of these high resistance arteries results in a low resistance and high flow state in the intervillous space, which optimizes delivery of oxygen and nutrients to the fetus. This change in resistance is reflected in uterine artery Doppler studies by a high diastolic velocity with continuous flow during diastole.

The following study is to study the role of Doppler in the prediction of pregnancy induced hypertension using persistence of diastolic notch more than 24 weeks and > 95 th percentile of pulsatility index. Efficacy of Doppler in detection of pregnancy induced hypertension compared to other risk factors are studied. The results are
discussed about the sensitivity and specificity of diastolic notching in prediction of pregnancy induced hypertension.

**KEY WORDS:**

Pregnancy, hypertension, Doppler, diastolic notching, pulsatility index