Abstract:

OBJECTIVE: The role of Biophysical Profile Score and resistive index of the umbilical artery for monitoring pre-eclampsia patients. DESIGN: Descriptive prospective study. SETTING: Kenyatta National Hospital and Mater Hospital, Nairobi, Kenya. SUBJECTS: One hundred and ten cases during a three month period. RESULTS: Normal biophysical profile scores were found in 93 (84.5%), and 17 (17.5%) cases had abnormal scores ranging from mild to severe foetal distress. Resistive index of umbilical artery (RI-UA) were normal in 72 (66.1%) and high resistive index accounted for 33.9%. Intra-Uterine Growth Restriction (IUGR) was a prominent finding accounting for 30.5%. A positive relationship was shown to exist between IUGR and RI-UA and also with severity of hypertension with P-values < 0.05. Resistive index of umbilical artery was positively related to the duration of illness confirming its dependence on chronicity (P = 0.004). Resistive index of umbilical artery proved to be an earlier indicator of foetal compromise before any foetal distress becomes obvious. CONCLUSION: Regular obstetrical ultrasound foetal surveillance in pre-eclampsia patients is important for foetal wellbeing. Doppler evaluation of high risk patients is more sensitive test than the biophysical profile score.