Editor's Pen

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Hypertension and Cardiovascular Diseases in Pregnancy

Cardiovascular diseases (CVD) is the leading cause during Pregnancy occurring 33% of maternal death. There is also increasing evidence of significant link between complication of Pregnancy and CVD in later in life.

Pregnancy complications such as preeclampsia, gestational hypertension, preterm delivery and delay of an infant with IUGR provide mothers cardiovascular disease adaptability of physiological stress presents of CVD in pregnancy women posing a difficult clinical scenario in which the responsibility of the treating physician extend to the unborn faetus. Profound changes occur in the maternal circulation that have the potential to adversely affect maternal and faetal health especially in the presence of underlying heart disease.

Cardiovascular complications related either to hypertension in pregnancy or to establish cardiac disease either congenital or squired. Hypertension in pregnancy (PET) is a common serious complication to be looked for carefully and as a high risk pregnancy, chronic hypertension ie, pre-existing hypertension need to be evaluated with proper family history, obesity, multiparty or other disease known to be effect kidneys. Pre existing hypertension secondary to renal disease should be suspected when protinuria is disproportion act to the degree of hypertension specially when the patient is multifarious or presence of hypertension prior to 34 weeks.

Pregnant women presenting with PET had renal biopsy showing evidence of preexisting renal parenchyma or vascular disease. Women with diagnosis PET prior to 34 weeks shows 70% of pre-existing kidney disease on renal biopsy.

Advance diagnosis and treatment congenital disease in pregnancy have led to dramatically improved survival rates and consequently the predominant during pregnancy has shifted from Rheumatic to congenital heart disease. During pregnancy, total blood plasma volume increases by 50% however RBC increases only by 3%, ultimately resulting in a decrease hemoglobin and hematocrit value. The heart is able to accommodate increases in volume primarily because of decrease systemic vascular resistance. Cardiac artifact increases by 30 to 35% of which half of this increase in cardiac output occurs by 8 weeks of pregnancy profound alteration also occur in fibrinogen and factor VIII leading to increase chances of thromboembolic complications.

Congenital heart disease particularly Tetra logy of fallots, Isennenger syndrome, Edsteinanomaly are the diseases where serious complication of both mother and faetus may occurs where as aortic coarctation, ASD, VSD etc. are the diseases where complications are less.

Thus pregnancy with CHD or RHD should be taken care of in a well equipped specialized centre where medical professionals has to work as a team of obstretrian, cardiac consultant and good physician.

At last, diagnosis of hypertension during pregnancy is an utmost important where underlying reason of hypertension whether accrued or congenital, has to be diagnose.

Scenario of treatment of hypertension/cardiac disease has improved in modern medicine practice but yet to go long way in this particular segment to get result of minimum maternal and faetal mortality and morbidity.