

Editorial

Overview of high risk pregnancy

With the changing demographics of Indian Population including increasing maternal age and weight during pregnancy, higher rates of pregnancies conceived by artificial technology and increasing number of caesarean section deliveries, complicated pregnancies have arisen.

High risk pregnancies may be simply classified any pregnancy in which there is a maternal or fetal factors that may adversely effect the outcome.

Many conditions may indirectly and truly intervened before or early in the perinatal period. When diagnosed through an appropriate method before pregnancy, conditions like Rh isoimmunisation, diabetes and epilepsy can be managed to minimise the risk of mortality and morbidity to both mother and baby.

However, it is not possible some other conditions like premature rupture of membrane, preeclampsia and premature rupture of membranes prior to pregnancy. To detect and manage these challenging situations, the obstetrician must maintain constant vigilance once pregnancy is established.

To tackle and manage this challenges obstetrician should keep constant vigilance. Many scientific breakthrough took place towards evaluation of fetal health and diseases in early 1960's.

In 1970's, the decade of perinatal medicine, paediatrician and obstetrician combined forces to continue improving perinatal survival.

In 1980's development of comprehensive evaluation of fetal condition with the biophysical profile, introduction of cordocentesis for diagnosis and therapy, the development of antenatal steroid therapy and ant surfactant with assisted reproductive technique facilitates to combat high risk pregnancy and to reduce the maternal and fetal mortality and morbidity rates.

Hence we can very precisely includes factor relating to high risk pregnancy and to treat properly.

(1) Maternal Nutrition :- #Increase body mass index, weight gain > adversely effect pregnancy outcome # Nutritional supplement like multivitamin, protein supplement, iron supplement, calcium, magnesium and vitamin D3> decreases the adverse effect.

Vitamin E Vitamin C and 3-N fatty acid> reduces preterm labour, preeclampsia thus having beneficial effect.

(2) Abuse of alcohol and substances:- Known to be detriment us to any pregnancies women aged 15-44 who have used alcohol (90%) and use substances like cocaine etc known to be indirect pregnancy outcome rate leading to IUGR, neonatal abstinence syndrome, fetal distress, preterm labour, still birth and sudden infant death syndrome,

(3) Environmental Agents and reproductive risk > principal of reproductive toxicities apply to environmental agents. A large proportion of adverse outcomes are unrelated to exposure. Only 5% of congenital malformations attributed to exposure to a chemical or pharmaceutical agent. Specific agent may be non toxic in low doses but toxic at higher doses. Such as X-ray exposure < 50 rad usually minor effects but >5 rad may be associated with microcephaly and mental retardation. The adverse effect thus relates to amount, time of exposure, amount absorb of different toxic agent. There are specific agents which is very much toxic to foetus mother like lead, mercury, pesticides, herbicides and Polychlorinated -diphenyls.

(4) Genetic Disorder > Genetic screening begins with an accurate family history, past history of still births and abortions including congenital malformation like cardiac defects, cleft lip and palate and neural tube defects. Genetic study should be done specifically in above mentioned factors and to avoid adverse pregnancy outcome like mendelian inheritance, hemoglobinopathies, cystic fibrosis etc.

(5) Maternal diseases like diabetes mellitus specially gestational diabetes, chronic renal disease, asthma, epilepsy, hypertension, immunological disease like SLE, HIV infections are the common and major factors/diseases needs vigilant obstetrical care where obstetrician should lead a team of speciality concern of the above diseases and a good team efforts will definitely reduce and minimise the adverse outcome of these high risk pregnancies.

India is advancing day by day in the field of obstetrics and with the help of higher sophisticated diagnostic tools and super specialise approach reduces markedly the maternal and fetal mortality and morbidity particularly in high risk pregnancies.



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— *Hony Editor*