INTRODUCTION

High risk pregnancy is defined as any previous or current obstetric problems, and associated medical disorders, which adversely affect fetal or maternal outcome and may lead to increase peri-natal or maternal mortality before or after delivery.

(W.D.R. Writer 1986)

Normal pregnancy is characterized by generalized vasodilatation, associated with a significant lowering of both systolic and diastolic blood pressures, an increase in the blood volume 25-30%, and an increase in the cardiac output 25-30%. These changes result in increased blood flow to a number of maternal organs and to developing utero placental circulation.

(Larkin H, and Gallery EDM. 1998)

Pregnancy is also associated with hyperplasia of the beta cells of the maternal islets of langerhans with increased secretion of insulin and greater sensitivity to a lower dose of glucose compared with non pregnants. By the second half of pregnancy, basal plasma concentration of immuno-reactive insulin increase and any glucose load produces a faster rise of insulin to a higher peak plasma concentration compared to non pregnant controls.

(Sanjoy Datta and John L. Kitzmiller 1982)

Pre-eclampsia is a progressive disease with a very variable mode of presentation and rate of progression. Of all the features of the syndrome, hypertension, pregnancy induced proteinuria, excessive weight gain and oedema are the classic clinical manifestation. Other features include thrombocytopenia, abnormal liver functions tests, hypo-albuminemia and eclampsia. Pre eclampsia is not only common and dangerous for both

mother and baby, but also unpredictable in onset and progression. The only definitive treatment of pre eclampsia is termination of pregnancy.

(M.C. Mushambi and A.W. Halligan 1996)

The optimal management of the pre eclamptic patients requires close cooperation between anesthesiologist and obstetrician both before and after delivery. The anesthesiologist should be consulted early, particularly in severe cases. Whatever the choice of anesthesia, convulsions must first be controlled, hypertension treated and, if regional anesthesia is to be used, blood volume restored towards normal.

(Cunnigham FG. 1992)

Regional anesthesia is absolutely contra-indicated in the presence of coagulopathies. General anesthesia is indicated for emergency cesarean section for fetal distress or on occasions when regional anesthesia has either failed or is contra indicated.

(M.C. Mushambi, and A.W. Halligan 1996)

Diabetes is the commonest medical problem encountered in pregnancy and is no longer considered a single entity, but a heterogeneous collection of over thirty diseases all characterized by reduced glucose intolerance. Gestational Diabetes is associated with advanced maternal age, Obesity, a family history of DM and , a history of still birth, neonatal death or fetal malformation. *(Datta S. 1985)*

Our problem in these patients must be to prevent pre mature delivery of the infant prior the period of its viability and secondly, termination of the pregnancy at the point of viability before the dreaded late intra-uterine accident can occur.

(White P. 1987)

Good anesthetic care requires careful patient evaluation, assessment of complications and an understanding of the pathophysiology of diabetic pregnancy. Epidural or spinal anesthesia is preferred for delivery since both avoid the possibility of fetal/neonatal depression with a risk of acidosis in spinal anesthesia compared to similar patients who received general anesthesia. This acidosis appeared to be related to both maternal hyperglycemia and maternal hypotension.

(Datta S. 1985)

In the past thirty years, a dramatic shift has occurred in the etiology of cardio-vascular lesion. Previously, acquired disease usually rheumatic fever was twenty times more common than consequential heart disease.

Now, that ratio has shifted due to the decline in the rheumatic heart and also the increased longevity in the women with congenital heart disease.

(Hibbard LT. 1978)

Care of the parturient with cardiac disease may be one of the challenging tasks required for an anesthesiologist. The anesthesiologist, obstetrician and the cardiologist must work as a team to ensure a safe and comfort delivery.

(William R. Camann, and Mursha L. 1999)

Anesthetic management is directed towards minimizing the added stress of labor and delivery. Patients with mitral valve disease, aortic insufficiency or congenital lesions with left to right shunt, these patients benefit from regional technique especially continuous epidural techniques. While patients with aortic stenosis, congenital right to left shunt are better managed by intra spinal opioids, medications and general anesthesia.