## SREE BALAJI MEDICAL COLLEGE AND HOSPITAL <u>DEPARTMENT OF OBSTETRICS AND GYNAECOLOGY</u> <u>CONFERENCE ON OBSTETRIC MEDICINE IN CLINICAL</u> <u>SETTING – COMIC 2025</u>

DATE: 18/09/2025





## WELCOME ADDRESS – Dr.T.S. MEENA PROF & HOD OBG DEPARTMENT



## **SPEAKER 1** - Dr. Aparna Sridhar (USA) **TOPIC** - Two Lives Under Pressure – The Pre-Eclampsia Puzzle



Pre-eclampsia is a multi-system hypertensive disorder of pregnancy that remains a major cause of maternal and perinatal morbidity and mortality worldwide. It is characterised by abnormal placentation, endothelial dysfunction, and systemic vasospasm, leading to hypertension, proteinuria, and end-organ damage. The condition threatens two lives at once—mothers face the risk of seizures, stroke, HELLP syndrome, and renal or hepatic failure, while the foetus may suffer from growth restriction, prematurity, or intrauterine death. The puzzle lies in its unpredictable course: while some women progress rapidly to severe disease, others remain stable. Current research focuses on identifying biomarkers for early prediction, preventive strategies like aspirin and calcium, and improved surveillance tools. Management requires balancing maternal safety with foetal maturity, often necessitating timely delivery as the only definitive cure.

**SPEAKER 2** - Dr. Sruti Chandrasekaran **TOPIC** - Fat & Foetus – Predicting Complications, Protecting Mothers



Obesity in pregnancy is one of the fastest rising concerns in obstetrics. Excess maternal adiposity alters the intrauterine environment and impacts both maternal and foetal outcomes. Obese mothers are at increased risk for gestational diabetes, hypertensive disorders, obstructed labour, caesarean section, postpartum haemorrhage, and wound complic/ ations. For the foetus, maternal obesity is associated with macrosomia, shoulder dystocia, birth trauma, congenital anomalies, and long-term metabolic risks such as childhood obesity and type 2 diabetes. Predicting complications involves careful antenatal risk assessment using BMI, glucose tolerance tests, and ultrasound monitoring of foetal growth. Protecting mothers requires a multidisciplinary approach with nutritional guidance, physical activity, early screening, and vigilant intrapartum care. Understanding the link between maternal fat and foetal outcomes is key to breaking the cycle of metabolic disease across generations.



**SPEAKER 3** - Dr. Vishala **TOPIC** - Capsule on VTE in Pregnancy



Venous thromboembolism (VTE), which includes deep vein thrombosis (DVT) and pulmonary embolism (PE), is a leading preventable cause of maternal mortality. Pregnancy creates a hypercoagulable state through hormonal influences, venous stasis, and endothelial injury—classically described as Virchow's triad. Risk factors include obesity, advanced maternal age, thrombophilia, prolonged immobility, caesarean delivery, and previous history of VTE. Clinical presentation

may be subtle, making diagnosis challenging. Anticoagulation with heparin is the mainstay of treatment, as warfarin is teratogenic. Prophylaxis in high-risk women is crucial, especially in the postpartum period when risk peaks. Awareness and early intervention ensure safety for both mother and foetus in the face of this silent but deadly complication.



**SPEAKER 4** - Dr. Anne Princy **TOPIC** - Cardiac Challenges in Pregnancy – From Heart to the Womb



Pregnancy is associated with profound cardiovascular adaptations, including a 40–50% increase in blood volume, elevated cardiac output, and reduced systemic vascular resistance. For healthy women, these changes are well tolerated, but for those with cardiac disease, the demands of pregnancy can unmask decompensation. Rheumatic heart disease, valvular disorders, congenital heart lesions, cardiomyopathies, and arrhythmias may pose significant risks during gestation,

labour, and the puerperium. Maternal complications include heart failure, arrhythmias, and thromboembolism, while foetal risks include growth restriction, prematurity, and perinatal loss. Early diagnosis, pre-conception counselling, multidisciplinary care involving cardiologists and obstetricians, and judicious management during labour are vital. Understanding these challenges helps clinicians support the maternal heart while safeguarding the life of the foetus.



**SPEAKER 5** – Dr. Sandhya Suresh **TOPIC -** Bridging Obstetrics and Nephrology – The Story of PRAKI



Pregnancy-related acute kidney injury (PRAKI) is an under-recognized but serious complication in obstetric practice. The kidneys are especially vulnerable during pregnancy due to altered hemodynamics, increased filtration load, and susceptibility to infections. Causes of PRAKI range from haemorrhage and sepsis to hypertensive disorders like pre-eclampsia and HELLP syndrome. In some regions, unsafe abortions and septic complications remain significant contributors. PRAKI can lead to maternal morbidity from fluid overload, electrolyte imbalances, and chronic

kidney disease, while foetal risks include growth restriction, prematurity, and stillbirth. Early detection with simple tests like serum creatinine and urine output monitoring, coupled with timely referral, can change outcomes dramatically. Collaborative care between obstetricians and nephrologists ensures better survival and reduces the burden of long-term renal disease in women of reproductive age.



**SPEAKER 6** - Dr. Manasa **TOPIC** - Capsule on DKA in Pregnancy



Diabetic ketoacidosis (DKA) in pregnancy is a rare but life-threatening metabolic emergency. Unlike in non-pregnant individuals, it can develop rapidly, even at relatively lower blood glucose levels, due to the diabetogenic effects of pregnancy hormones. Common precipitants include infection, missed insulin doses, vomiting, or use of β-agonists. The pathophysiology involves severe insulin deficiency, hyperglycemia, ketosis, and metabolic acidosis, which compromise maternal and foetal oxygenation. Foetal risks are particularly severe, with high rates of intrauterine demise if untreated. Early recognition of symptoms such as nausea,

abdominal pain, and altered sensorium is essential. Management requires aggressive fluid replacement, insulin therapy, electrolyte correction, and continuous maternal and foetal monitoring. Awareness of DKA and its unique features in pregnancy is critical for prompt intervention and survival.



**SPEAKER 7** - Dr. Thamaraiselvan Sivagnanam **TOPIC** - Hepatic Hazards of Motherhood



Pregnancy brings unique challenges to liver function. While mild alterations in liver enzymes can occur physiologically, certain disorders are exclusive to pregnancy and carry grave risks. Intrahepatic cholestasis of pregnancy presents with pruritus and raised bile acids, posing risk of foetal demise. Acute fatty liver of

pregnancy, though rare, leads to fulminant hepatic failure, coagulopathy, and high maternal and foetal mortality if unrecognized. HELLP syndrome (Haemolysis, Elevated Liver enzymes, Low Platelets) represents a severe variant of preeclampsia, often requiring urgent delivery. Differentiating these conditions from chronic liver disease is vital. The hepatic hazards of pregnancy demand high clinical suspicion, rapid investigations, and aggressive supportive care. Timely intervention can prevent maternal liver failure and safeguard foetal survival.



**SPEAKER 8** - Dr. Roshan Kumar **TOPIC** - Asthma in Pregnancy – Triggers, Treatment, Triumphs



Asthma affects 4–8% of pregnant women, making it the most common chronic respiratory illness complicating gestation. Pregnancy does not have a uniform effect—while one-third of women improve, another third worsen. Poorly controlled asthma can lead to hypoxia, preterm labour, pre-eclampsia, low birth

weight, and even perinatal mortality. Triggers include allergens, infections, gastro-oesophageal reflux, and poor medication adherence. The cornerstone of management is maintaining adequate maternal oxygenation, since maternal hypoxia directly compromises foetal wellbeing. Inhaled corticosteroids and bronchodilators remain safe and effective when used correctly. With education, monitoring, and treatment compliance, most women with asthma can expect favourable maternal and foetal outcomes—transforming a potential risk into a success story of triumph.



**BOOKS RELEASE** 





THANK YOU