

management of neonatal cardiological emergencies. The morbidity and mortality associated with surgery depends essentially on the severity of the malformation. In fact, the improvement of prenatal diagnosis has not been associated with an increase in the number of medical interruptions of pregnancy, but rather with improved prognosis of certain anomalies, such as transposition of the great arteries. Early diagnosis and referral to pediatric cardiac center for proper management will improve the outcome.

Keywords: Congenital heart disease, fetal echography, prenatal diagnosis, mortality

PP-018 Body mass index change in pre-pregnancy normal weight women and fetal growth

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Objective: Optimal gestational weight gain has not yet been fully clarified and remains one of the most controversial issues in modern perinatology. The proportional but independent correlation of maternal pregestational body height and mass with gestational weight gain has long been demonstrated. The role of optimal weight gain during pregnancy is beyond dispute because it influences, directly or indirectly, the occurrence of many gestational, peripartum and postpartum complications. However, the catch is that greater gestational weight gain quite frequently decreases one peripartum/perinatal risk (e.g. likelihood of preterm delivery and hypotrophy), while at the same time increasing another one (e.g. likelihood of preeclampsia and macrosomia). Therefore, the recommended gestational weight gain cannot be the same for all women with the same BMI (body mass index). In the present study, BMI change in pregnant women was investigated as an input-output factor in the context of quantitative and qualitative assessment of fetal growth.

Methods: The study included 16,751 mothers and their neonates. Mothers with singleton term pregnancies (37th to 42nd week of gestation) with normal pregestational body weight and BMI (18.5-25 kg/m²) were enrolled. Pregnancies complicated with any type of diabetes mellitus, preeclampsia, Rh or other immunization, fetal hydrops, neonatal malformations, still births or early neonatal deaths, and those with incomplete medical documentation were excluded. Fetal growth assessment from body mass according to gestational week was performed by comparison of the measured values and the standards developed at the same institution. The χ^2 -test was employed on analyzing dependence of the variables

that could be categorized qualitatively.

Results: Gestational weight gain was classified according to two criteria, i.e. weight gain expressed in kilograms and BMI change. Study women were divided into two-kilogram groups according to body weight change expressed in kilograms. When BMI was used as a measure of body mass change, groups were defined by 1 kg/m² change. Statistical difference between the values obtained and the presumed 10% incidence of LGA (large for gestational age) and SGA (small for gestational age) newborns per group was calculated for each group. The incidence of SGA declined, while the incidence of LGA newborns increased with the maternal BMI change increase. On cumulative analysis of the incidence of SGA and LGA neonates according to maternal BMI groups, all differences between the measured and expected values were statistically significant, with the only exception of gestational BMI change of 6-7 kg/m² (SGA 8.9% vs. LGA 9.3%; $\chi^2=2.65$; $p=0.26$). Decrease in gestational weight gain was associated with an increased incidence of SGA newborns.

Conclusion: Utilizing BMI change as an output factor will reduce the error caused by disregarding the body height variation in women with the same BMI. We are fully aware that our study cannot offer definitive recommendations for optimal gestational weight gain, but we are positive that it offers a new perspective for additional efforts towards the main goal of developing a formula for optimal gestational weight gain calculation for each individual women, thus providing due conditions to achieve the most favorable perinatal outcome.

Keywords: Body mass index change, pregnancy, small for gestational age, large for gestational age

PP-019 Comparing neonatal outcomes of pregnant women treated for opioid use disorder (OUD) with mono-buprenorphine to neonatal outcomes of pregnant women treated for OUD with combination Buprenorphine + Naloxone

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Objective: Over 20,000 U.S. babies each year are diagnosed with Neonatal Abstinence Syndrome (NAS). These neonates require Neonatal Intensive Care Unit attention and are at risk for long term developmental