



## AB022. Maternal obesity and impact on the neonate

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**Abstract:** Obesity has become an ever-present problem regardless of age, gender or socioeconomic background. An increase over the past two decades has also been noted in the pregnant population. More women are obese at their first prenatal visit and then subsequently gain more weight throughout the pregnancy than ever before. Maternal obesity can lead to problems not only in the mother but also with the process of labor and ensuing neonatal complications. The National Institute for Health definition of obesity has three levels: Level I: BMI 30–34.9 is associated with high risk of disease, Level II: BMI 35–39.9 is associated with very high risk, Level III: BMI 40 or greater is extremely high risk. The maternal complications include preeclampsia, gestational diabetes

mellitus, thromboembolism and increased mortality. The labor complications include increased risk for assisted, instrumental delivery, hemorrhage and cesarean delivery. The increased risk of cesarean section remained higher even when adjusted for potential confounders such as preeclampsia, diabetes and macrosomia. One of the most common neonatal problems associated with maternal obesity is macrosomia with a birthweight greater than 4 kilograms. Other newborn complications include congenital anomalies, stillbirth and hypoglycemia. What is known concerning maternal obesity and neonatal outcomes has improved in recent years; however, the effect of maternal obesity on an infant's brain and the severity of ischemic damage has not been well studied. Our published research has shown that there are increased risks of difficult delivery room course and respiratory complications to the near-term neonate and the already vulnerable premature infant population. In newly completed research, we have found that there is an increased incidence of hypoxic ischemic encephalopathy (HIE) in infants born to obese mothers.

**Keywords:** Maternal obesity; complications; neonate

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