Overall, there was a 60% of occurrence of GDM after initial screening in those with a history of glucose intolerance.

CONCLUSION: Subjects with a history of glucose intolerance should be screened at the first visit with a 3-hour GTT, given the very high rates of GDM in these patients. An early initial GCT cut-off value for lower risk subjects could not be determined.

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Thigh Measurement and Adiposity Fetal Accumulation: A Cohort Study [7R]

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INTRODUCTION: The evaluation of the thigh measurement and fetal adipose tissue accumulation has been used to supplement fetal weight as a way to evaluate the muscular and subcutaneous compartments. To evaluate the accumulation and the factors associated with fetal adiposity.

METHODS: Cohort study with 200 pregnant women followed in primary care units. The fetal adiposity was assessed by ultrasound, with 28 and 36 weeks of pregnancy, as well as anthropometry, the sociodemographic and obstetric aspects. The results were analyzed using the Epi-Info 7.0, with 5% significance level.

RESULTS: The mean fetal thigh circumference (FTC) was 11.2 cm±1.1 and 17±1.8 cm, at 28 and 36 weeks, respectively ($P<.0001$). There was a positive correlation between the FTC and birth weight (r=0.60; 95% CI=0.49–0.69, $P<.0001$), the maternal circumference arm (r=0.15 95% CI=0.003–0.29, $P<.05$), the maternal waist circumference (r=0.34; 95% CI=0.19–0.48, $P<.0001$) and skin fold (r=0.19 95% CI=0.04–0.37, $P=.01$), triglyceride (r=0.20; 95% CI=0.04–0.35, $P<.01$) and insulinemia (r=0.24; 95% CI=0.07–0.39, $P=.006$). There was no correlation with fasting glucose ($P=.13$) and total cholesterol and fractions.

CONCLUSION: The nutritional status and the accumulation of fat in pregnancy are positively associated with fetal thigh circumference, reflecting the nutritional status at birth.

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Analysis of Clinically Significant Double Thrombophilias Versus Single Thrombophilias During Pregnancy [8R]

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INTRODUCTION: Pregnancy is a hypercoaguable state and for patients with inherited thrombophilias, it may represent a period of heightened risk. There have been some data suggesting that women with double thrombophilias (DT) have an even greater risk of obstetrical complications. A paucity of data analyzing the impact of DT when compared to single thrombophilias (ST) has been published due to the rarity of these conditions identified in patients.

METHODS: This is a retrospective cohort study of all patients in a single maternal-fetal medicine practice who were found to have a clinically significant inherited thrombophilia and treated with anticoagulation between 2005–2013. Thrombophilias evaluated included: Factor V Leiden (FVL), Prothrombin G20210A gene mutation (PGM), Protein S deficiency (PSD), Protein C deficiency (PCD), and Antithrombin III deficiency (ATIII). DT were defined as the presence of 2 clinically significant thrombophilias or homozygosity for FVL or PGM. Patients with DT were compared to those patients with ST. Demographic and obstetrical outcome data were collected and compared between the two groups. The data was analyzed with Pearson's chi-squared or Student's t test as appropriate.

RESULTS: 156 pregnancies with clinically significant thrombophilias were identified. Demographic characteristics were equivalent between the two groups. There were no significant differences for obstetrical outcomes between patients for birthweight <10%, intrauterine fetal demise, preterm delivery (spontaneous or iatrogenic), pregnancy induced hypertension, or neonatal intensive care unit admission.

CONCLUSION: There were no significant differences in obstetrical outcomes for patients with clinically significant DT versus ST when treated with anticoagulation. This information may be reassuring for patients with DT.

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Determining the Rate and Causes of Severe Maternal Morbidity to Improve Obstetric Quality of Care [9R]

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INTRODUCTION: Identifying cases of severe maternal morbidity (SMM) and reviewing the underlying cause is essential to improving quality of obstetrical care. We sought to determine the rate and causes of SMM using an expanded definition including ICU admission, unanticipated hysterectomies, 2 or more liters blood loss (EBL), transfusion of 4 or more units of any blood product, and select readmissions.

METHODS: We prospectively identified women who met criteria for SMM at our institution from July 1, 2014 to June 30, 2015. All cases were reviewed and discussed by a multidisciplinary team. Analysis was limited to patients who delivered at our institution.

RESULTS: 4198 deliveries occurred during the 12 month period. Fifty-two (1.2%) women experienced a SMM (62% cesarean deliveries, 89% postpartum). Of the 52 women, 29 (56%) met 1 criteria, 20 (38%) met 2 criteria, and 3 (6%) met 3 or more criteria (33% ICU, 46% blood products, 62% EBL, 6% hysterectomies, 12% readmissions). Women with cesarean delivery were more likely to experience more than 4 units pRBCs as reason for SMM ($P=.05$). ICU admissions were no different by mode of delivery. Restricting the definition of SMM to ICU admission and 4 or more units of pRBC identified only 69%.

CONCLUSION: SMM occurs more postpartum and in women with cesarean deliveries. Restricting the SMM definition leads to missed opportunities in identifying additional cases of SMM, specifically those with large EBL and readmissions with delayed morbidity. Future tracking and evaluation of SMM should include large EBL and postpartum readmission to help identify and improve all aspects of SMM.

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Impact of Co-Twin Demise on Circulating Cell-Free DNA (ccfDNA) Testing [10R]

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INTRODUCTION: Sequenom Laboratories' clinical validation data show high sensitivity and specificity in multifetal gestations. To date more than 16,000 such samples, have been analyzed in clinical practice. A small subset of NIPT results were reported as discordant with fetal outcome. Upon investigation co-twin demise could be identified as a possible cause for the discrepant results. Here we review these co-twin demise discordant results.