

collection in independent practice, and appears to be an overlooked factor that may improve the overall success of cord blood banking.

Financial Disclosure: *The authors did not report any potential conflicts of interest.*

Home Birth to Hospital Transfers: How Do Prenatal Visits and Stage of Labor at Transfer Affect Outcomes? [26O]

Sally R. Greenwald, MD, MPH

UCSF, San Francisco, CA

Teresa Sparks, MD, Sanae Nakagawa, MA, and Mary Norton, MD

INTRODUCTION: Approximately 25,000 deliveries in the US last year were home births, and the risk of transport to a hospital during attempted home birth has been reported as 25–37%. We examined whether maternal and neonatal outcomes are affected by cervical dilation at time of transfer or by number of prenatal visits (PNV) with an obstetrician.

METHODS: This was a retrospective cohort study over years 2012–2014 of women with singleton gestations at term who attempted a home birth and were transferred during labor to our university hospital. Multiple gestations and fetal anomalies were excluded. Number of PNV (<12 versus ≥ 12 visits as recommended by ACOG), cervical dilation at time of transfer, and several maternal and neonatal outcomes were extracted from an existing perinatal database.

RESULTS: All women had attended at least 1 PNV. The overall cesarean rate for planned home births was 34.3%, and 10% of women transferred their care at 10 cm. Among women who were 0–5 cm, 6–9 cm, versus 10 cm at transfer, no significant difference in mode of delivery was found. No differences in maternal outcomes (blood transfusion, postpartum infection, hospital stay, readmission, and others) were observed comparing groups by cervical dilation at presentation or by number of PNV. Similarly, neonatal outcomes of Apgars, pH, resuscitation, and disposition did not differ significantly between groups.

CONCLUSION: Cervical dilation and number of PNV did not affect maternal or neonatal outcomes. Further research is needed to guide prenatal and intra-partum care to improve outcomes for women transferring care to the hospital from an attempted home birth.

Financial Disclosure: *The authors did not report any potential conflicts of interest.*

Willingness to Offer Cesarean Delivery (CD) for Fetal Indications When the Fetus Has a Common Aneuploidy by Region [27O]

Gary Fruhman, MD

St. Louis University School of Medicine, St. Louis, MO

Collin Miller, MSW, Rachael Bradshaw, MS, Darbey Raible, MS,

Erol Amon, MD, and Kimberly Martin, MD

INTRODUCTION: This study was designed to examine the willingness of obstetricians to offer CD when the fetus has a common aneuploidy and to assess regional differences in the United States.

METHODS: A survey was emailed to 2,875 OB-GYNs and 902 (31%) actively practicing Obstetricians responded. Respondents were categorized into U.S. Census Bureau regions based on their primary state of practice with 160 (19%) from the Northeast (NE), 263 (29%) from the Midwest (MW), 267 (32%) from the South (S), and 163 (20%) from the West (W). We asked “Would you offer CD for fetal indications to mothers carrying babies with a diagnosis of: T21? T18? T13? 45, X?” Answer choices were: Yes, No, or It depends. Chi-square tests were used to compare responses using an alpha level of 0.05.

RESULTS: Overall regional differences emerged for Trisomy 18 and 13 ($P=.04$ and $P=.01$) with a greater proportion of respondents from the South indicating they would not offer CD (T18 - S=52%, NE=37%, MW=38%, W=42%; T13 - S=59%, NE=42%, MW=45%, W=49%). Focused pairwise comparisons revealed that respondents from the South were more likely to not offer CD for Trisomy 18 and 13 compared to respondents from the Northeast and Midwest.

CONCLUSION: Obstetricians varied as to whether they would offer CD for fetal indications for Trisomy 18 and 13 based on region. The

medical and ethical issues related to CD for aneuploid fetuses merit a national conversation to ensure that all pregnant women are afforded the opportunity to make an informed decision regarding their options for delivery management.

Financial Disclosure: *Dr. Bradshaw (Assistant Professor, Saint Louis University School of Medicine) disclosed the following—Natera, Inc.: Consultant/Advisory Board, Speaker/Honoraria includes speakers bureau, symposia, and expert witness. Dr. Martin (Associate Professor, Saint Louis University School of Medicine) disclosed the following—Natera, Inc.: Employment, Ownership Interest includes stock, stock options, patent or other intellectual property, Speaker/Honoraria includes speakers bureau, symposia, and expert witness. The other authors did not report any potential conflicts of interest.*

The Impact of a Hospital Based Doula Program on Cesarean Section Rate [28O]

Bethany Brady, DO

Western Connecticut Health Network, Danbury Hospital,

Department of Obstetrics and Gynecology, Danbury, CT

Brandon-Luke Seagle, MD, Kathleen Moonan, MSN, RN, IBCLC,

Guoyang Luo, MD, PhD, Shohreh Shahabi, MD, and Erin Panarelli, MD

INTRODUCTION: Previous studies have shown a positive association between continuous labor support and positive perinatal outcomes including a shortened duration of labor, increased rate of spontaneous vaginal delivery and a decreased use of interventions including oxytocin, analgesia, operative vaginal deliveries and cesarean sections. The purpose of this study was to compare labor and delivery outcomes between a cohort of patients who received hospital-sponsored doula continuous labor support and a matched cohort of patients who did not elect to receive doula services.

METHODS: We analyzed the charts of all patients who delivered a single infant either by cesarean section or vaginal delivery between 1/1/2012 and 12/31/2013 at Danbury Hospital. Planned cesarean sections, multifetal gestations, fetal demises, urgent or emergent deliveries, and precipitous deliveries were excluded. The primary outcome was cesarean section rate. Secondary outcomes also calculated included labor augmentation rate, labor induction rate, VBAC rate, neonatal outcomes (Apgar score, weight). The results were adjusted for patient age and parity.

RESULTS: After exclusions, the cohort of patients who received doula care included 275 women and the matched cohort included 2688 patients. The rate of cesarean section in the Doula group was 19.6% whereas the rate was 16.2% in the control group ($P=.315$). VBAC rate, augmentation and induction rate were not statistically different between the two groups.

CONCLUSION: This study did not show a statistically significant decreased cesarean section rate among women who had continuous labor support. Limitations of this study include small sample size, limited data on socioeconomic factors between groups and possible confounding factors.

Financial Disclosure: *The authors did not report any potential conflicts of interest.*

Correlation Between Maternal Abdominal Adiposity and Anthropometric and Metabolic Profile During Pregnancy [29O]

Antonio H. Franca Neto, MD

Faculdade de Ciências Médicas de Campina Grande, Campina Grande, Brazil

Melania M. Amorim, MD, PhD, Adriana S. Melo, Maria do Carmo P. Lima, Aline Sena, and Girlene Azevedo

INTRODUCTION: Excessive accumulation of central fat is associated with increased risk of developing cardiometabolic complications and has affected women in various stages of life, including pregnancy. To evaluate the evolution of maternal adiposity and factors associated with fat accumulation during pregnancy.

METHODS: A cohort including 200 pregnant women evaluated at 16 weeks and the immediate postpartum period. Visceral adiposity (VA),



subcutaneous (SA), anthropometric measurements and the metabolic profile were analyzed. For analysis, Epi-Info 7.0 was used.

RESULTS: The VA averages were 5.2 ± 1.3 cm at 16 weeks and 5.6 ± 1.6 cm on postpartum ($P=.007$). At 16 weeks, there was a correlation between VA and weight ($r=0.32$, $P<.0001$), BMI ($r=0.28$, $P<.0001$), insulin ($r=0.22$, $P=.004$), and abdominal circumference (AC), arm and thigh ($r=0.31$, $P<.0001$; $r=0.25$, $P<.0001$, $r=0.15$, $P=.03$). In the immediate postpartum period, correlation was observed between VA and weight in the 16th and postpartum ($r=0.37$, $P<.0001$; $r=0.31$, $P=.001$), total cholesterol and glycosylated hemoglobin postpartum ($r=0.22$, $P=.01$; $r=0.18$, $P=.03$), insulin and LDL at 16 weeks ($r=0.23$, $P=.01$ and $r=0.22$, $P=.01$), AC and arm ($r=0.43$, $P<.0001$ and $r=0.35$, $P<.0001$) and CC at 16 weeks ($r=0.20$, $P=.013$).

CONCLUSION: There was a correlation between abdominal fat and the main variables.

Financial Disclosure: The authors did not report any potential conflicts of interest.

Text Message Based Remote Monitoring in the Management of Postpartum Hypertension [300]

Adi Hirshberg, MD

Maternal and Child Health Research Program, Department of Obstetrics and Gynecology, University of Pennsylvania, Philadelphia, PA

Sindhu Srinivas, MD, MSCE

INTRODUCTION: The ACOG Hypertension in Pregnancy guidelines recommend monitoring blood pressure (BP) at 72 hours and 7–10 days postpartum in women with a hypertensive disease of pregnancy. We investigated a bidirectional text messaging system as an alternative to in-person follow up.

METHODS: We performed a series of rapid cycle interventions in a cohort of women with CHTN, GHTN, or preeclampsia who delivered between September and December of 2014. Patients were given electronic BP cuffs and education prior to discharge. Standard texts were sent twice a day for 7 days post discharge reminding patients to send BPs. Standard responses were sent by the study obstetrician based on a management algorithm. Patients were also instructed to follow up with the usual care postpartum HTN clinic. Ability to meet ACOG guidelines was defined as the number of patients who texted BPs on post-discharge days 1 or 2 and days 5, 6, or 7.

RESULTS: We enrolled 32 patients. Six (19%) returned for their scheduled usual care office BP check. We received at least one BP from 27/32 (84%) patients. Nearly 63% (20/32) texted BPs on 5 of the 7 days. 27/32 (84%) texted at least one BP reading on day 1 or 2, and 21/32 (66%) texted at least one BP on day 5, 6, or 7 ($P=.001$ vs usual care). Two patients required medications for elevated BPs and none were readmitted for HTN.

CONCLUSION: Remote BP monitoring via text messaging is an effective, patient centered method for postpartum HTN surveillance. Further testing is needed prior to widespread adoption within the broader obstetric community.

Financial Disclosure: The authors did not report any potential conflicts of interest.

2:00 PM–3:00 PM

OBSTETRICS

Antenatal Corticosteroids Increases the Need for Insulin in Non-Diabetic Patients Based on BMI [1P]

Johanna C. Bringley, DO

Albany Medical Center, Albany, NY

Tara Lynch, MD, Kevin Kiley, MD, and Asha Rijhsinghani, MD

INTRODUCTION: The administration of antenatal corticosteroids is widely used in obstetrics for patients at risk for preterm delivery from 24–34 weeks gestation. A commonly recognized side effect from administration is maternal hyperglycemia. In women that have gestational or pregestational diabetes betamethasone can lead to severe hyperglycemia and rarely DKA. Obese women are known to be at

increased risk for glucose intolerance during pregnancy. The effect of betamethasone on blood sugar levels in non-diabetic but obese women is unknown.

METHODS: At Albany Medical Center, following steroid administration, glucose monitoring is routine in the high-risk patients. We conducted a retrospective study of all patients admitted from 1/1/2013–7/15/2015 that received a single course of antenatal corticosteroids at less than 34 weeks gestation. Patients were stratified according to the BMI at the time of administration. Of the 692 non-diabetic patients that received antenatal corticosteroids, 216 patients were categorized as being at high risk for glucose intolerance and were followed closely with fingerstick evaluations.

RESULTS: In patients with class 1 obesity we did not identify any evidence of glucose intolerance requiring treatment. Similarly in patients with class 2 obesity none of the patients required medical management for hyperglycemia. However 5% of women with class 3 obesity required treatment with insulin but the treatment lasted less than 48 hours.

CONCLUSION: Betamethasone can cause hyperglycemia in the non-diabetic obese patient. Non-diabetic women with class 3 obesity are at risk of hyperglycemia requiring insulin following betamethasone administration for fetal lung maturation.

Financial Disclosure: The authors did not report any potential conflicts of interest.

The Robson Classification: Monitoring and Comparing Cesarean Delivery Rates [2P]

Vivienne Souter, MD

Obstetrics Clinical Outcome Assessment Program, Seattle, WA

Katon Jodie, PhD, MS, Angela Chien, MD, Ellen Kauffman, MD,

and Kristin Sitcov, BS

INTRODUCTION: In April 2015, the WHO recommended the Robson Classification for monitoring and comparing Cesarean delivery (CD) rates. This classification categorizes CD into 10 mutually exclusive groups based on pregnancy characteristics. This study aimed to apply this classification to a US data set to monitor CD rates over time and target quality improvement.

METHODS: Prospective cohort of consecutive deliveries at one institution during two one-year periods (2012 and 2014). Chart abstracted data were collected as part of the Obstetrics Clinical Outcomes Program (OB COAP), a clinician-led, quality initiative. CD rates were calculated for patient groups as described by Robson. Relative risks and confidence intervals were calculated comparing CD rates in 2012–2014.

RESULTS: A total of 8,662 deliveries were included: 4,206 (singletons) in 2012 and 4,456 (4,339 singletons and 117 multiples) in 2014. During the study period, the overall CD rate in singletons decreased from 37.2% to 32.4% ($P<.001$). The CD rate significantly decreased in Group 1 (term singleton cephalic nulliparas in spontaneous labor) (26.4%–18.8% RR 0.8 CI 0.7–0.9) but rates were largely unchanged in other groups, including Group 5 (term singleton cephalic multiparas with a previous CD), the group contributing most to CD.

CONCLUSION: Applying the Robson classification to our data clearly highlighted targets for quality improvement as well as groups in which practice changes had been effective. The Robson also facilitated a standardized comparison with data at an international level and could be used similarly within the USA.

Financial Disclosure: The authors did not report any potential conflicts of interest.

Chorangiosis: Clinical Associations and Obstetrical Outcomes [3P]

Shariska Petersen, MD

Henry Ford Hospital, Detroit, MI

Raminder Khangura, MD, and Roopina Sangha, MD, MPH

INTRODUCTION: A 38-year old Class C diabetic at 36w4d was taken for urgent c-section after non-stress testing revealed Category 3

