OBJECTIVE: To examine the impact of epidural timing on mode of delivery in nulliparous women at term.

Alexandra Eller1, Ware Branch2, Li Lu1, Jim Zhang4, Isabelle Wilkins5, Judith Hibbard6, Ronald Burkman7, Jennifer Baillie8, Victor Hugo Gonzalez Quintero9, Kimberly Gregory10, Shoshana Haberman11, Christos Hatjis12, Mathew Hoffman13, Michelle Kominariak14, Helain Landy15, Mildred Ramirez16, Uma Reddy17, James Troendle17, Paul Vanvelkhuijzen18

1Intermountain Healthcare and University of Utah, Salt Lake City, Utah, 2Intermountain Healthcare and University of Utah, Obstetrics and Gynecology, Salt Lake City, Utah, 3Emmes Corporation, Rockville, Maryland, 4National Institute of Health, Maryland, 5University of Illinois at Chicago, Illinois, 6University of Illinois at Chicago, Obstetrics and Gynecology, Chicago, Illinois, 7Tufts University, Massachusetts, 8MetroHealth, Case Western Reserve University, Cleveland, Ohio, 9University of Miami, Dept of Ob/Gyn-MFM Division, Miami, Florida, 10Cedars-Sinai Medical Center, Los Angeles, California, 11Maimonides Medical Center, Brooklyn, New York, 12Children’s Hospital Medical Center of Akron, Akron, Ohio, 13Christiania Care Health System, Delaware, 14University of Illinois at Chicago, Chicago, Illinois, 15Georgetown University, Washington, District of Columbia, 16University of Texas Health Science Center at Houston, Houston, Texas, 17National Institute of Health (NIH), Maryland

RESULTS: Cesarean and operative vaginal delivery rates were compared between subjects with similar propensity groups to control for selection bias. Cesarean and operative vaginal delivery was used to stratify subjects within the early and late epidural confound the relationship between epidural timing and mode of delivery. There was no trend observed on inapartum complication, such as meconium, fetal distress and shoulder dystocia, between different BMI classes. An increase in BMI showed an association with maternal health issues such as asthma, chronic hypertension and diabetes. Obstetrical complications such as gestational diabetes, hypertension, preeclampsia were increased in obese patients. Babies had a higher rate of LGA, and lower arterial cord pH with increasing maternal BMI.

CONCLUSION: There is a significant increase in caesarean section rate with increasing BMI. Maternal obesity significantly contributes to a poorer prognosis for mother and baby during delivery and in the immediate post-partum period. Obstetrical care providers must counsel their obese patients regarding the risks and complications conferred by obesity and the importance of weight loss.

0002-9378/$ – see front matter • doi:10.1016/j.ajog.2009.10.188

Management of obstetric hemorrhage: using a risk assessment tool to predict hemorrhage

Kirthi Katakuri1, Todd Griffen1, Paul Ogburn1, Rashimi Adsumelli2, Adriann Combs3, Antonietta Lynch1, Cecilia Avila1, Reinaldo Figueroa1, J. Gerald Quirk3

1Stony Brook-Winthrop University Hospitals, Long Island, New York, 2Stony Brook University, Anesthesiology, Stony Brook, New York

OBJECTIVE: To evaluate the proper use, accuracy, and validity of a risk assessment tool (RAT) for predicting obstetric hemorrhage.

STUDY DESIGN: As part of our obstetric hemorrhage protocol (OHP), we developed a RAT as part of the order set used for admitting patients to the labor ward. The RAT divided all patients into high, moderate, or low risk for obstetric hemorrhage and automatically ordered appropriate interventions for those at higher risk. A retrospective review was performed to determine rates of hemorrhage in each of the risk categories. Patients with obstetric hemorrhage were those with blood loss more than five hundred milliliters in vaginal deliveries and more than thousand milliliters in cesarean deliveries, and those requiring additional interventions for clinical hemorrhage. The charts were reviewed for hemorrhage risk score, risk factors, need for transfusions, and other interventions. Statistical Analysis was performed using Excel 2007 and SPSS 16.

RESULTS: Of 804 admissions, 59.6% had vaginal deliveries and 32.2% underwent cesarean deliveries at term. The risk assessment form was utilized for 90.8% of admissions. 102 met criteria for obstetric hemorrhage. Percent (N) of low, moderate and high risk scores were 64.30% (517), 24.50% (197) and 1.99% (16) respectively. Low risk score correlated with hemorrhage with an odds ratio of 0.393 (95% CI 0.252 to 0.613, p<0.001), moderate risk with an odds ratio of 2.236 (95% CI 1.424 to 3.510, p<0.009) and high risk with odds ratio of 3.279 (95% CI 1.112 to 9.653, P<0.003). There were 445 patients with no risk factors for hemorrhage as listed on the RAT; only 4 of these patients had hemorrhagic complications (95% CI 0.004 to 0.0303, p<0.001). Patients with suspected abruption, coagulopathies, and placenta previa or accreta did show significant odds for hemorrhage. Patients with a prior history of obstetric hemorrhage had an OR of 79.4 (95% CI 19.8 to 318) for hemorrhage complications.

CONCLUSION: We report approximately 90% compliance with the risk assessment form. Risk scores were highly predictive of outcomes.

0002-9378/$ – see front matter • doi:10.1016/j.ajog.2009.10.189

Poster Session I