

97 Magnesium sulfate exposure and neonatal intensive care unit admissionAnna Girsen¹, Mara Greenberg², Yasser El-Sayed², Brendan Carvalho², Deirdre Lyell²¹Oulu University Hospital, Obstetrics and Gynecology, Oulu, Finland, ²Stanford University/Lucile Packard Children's Hospital, Obstetrics and Gynecology, Stanford, CA**OBJECTIVE:** To examine the effect of antenatal magnesium sulfate (MS) treatment on neonatal intensive care unit (NICU) admission among term newborns of mothers with preeclampsia.**STUDY DESIGN:** Secondary analysis of the Maternal-Fetal Medicine Unit Network Cesarean Registry including primary and repeat cesareans, and failed and successful vaginal births after cesarean delivery. Singleton pregnancies among women with preeclampsia and >37 weeks of gestation were included. Pregnancies with chorioamnionitis were excluded. Logistic regression analysis was used to determine associations between MS exposure and important outcomes. $P < 0.05$ was considered statistically significant.**RESULTS:** 2224 pregnancies of women with preeclampsia were included, of whom 1,795 (81%) received MS for eclampsia prophylaxis and 429 (19%) did not. MS exposure was associated with increased NICU admission (23% vs. 14% unexposed, $p < 0.0001$) whereas no significant difference was found in the length of newborn stay in NICU (median 5 days (range 2-91) vs. 6 days (range 3-37) in unexposed, $p = 0.45$). MS-exposed women were more likely to receive public insurance (51% vs. 40% unexposed, $p = 0.0008$) and have a labor induction (43% vs. 9% unexposed, $p = 0.02$), and less likely to be Caucasian (23% vs. 31% unexposed, $p < 0.0001$), be diagnosed with chronic hypertension (7% vs. 9% unexposed, $p = 0.04$), or undergo cesarean delivery (90% vs. 94% unexposed, $p = 0.03$). MS-exposed newborns had significantly lower birthweights (3288 vs. 3442 grams unexposed, $p < 0.0001$) and similar gestational ages at delivery (39.2 vs. 39.1 unexposed, $p = 0.11$). Logistic regression analysis adjusting for receipt of public insurance, race, chronic hypertension, labor induction, cesarean delivery, birthweight and gestational age found that NICU admission was significantly associated with MS exposure [OR 2.60, 95% CI 1.68-4.20, $p < 0.0001$].**CONCLUSION:** Antenatal magnesium sulfate treatment is associated with an increase in NICU admission among exposed term newborns of mothers with preeclampsia.**98 Maternal obesity and the risk of postpartum hemorrhage**Annelee Boyle¹, Julia Timofeev¹, Maisa Feghali¹, Sameer Desale², Menachem Miodovnik¹, Rita Driggers¹¹MedStar Washington Hospital Center, Obstetrics and Gynecology, Washington, DC, ²MedStar Health Research Institute, Biostatistics and Epidemiology, Hyattsville, MD**OBJECTIVE:** To determine if overweight and obese women are at increased risk of postpartum hemorrhage (PPH) and, if so, if the risk of PPH correlates with the degree of obesity.**STUDY DESIGN:** A retrospective cohort analysis of data in the MedStar PeriBirth labor database from 2009 to 2012. Overweight women [body mass index (BMI) 25.0-29.9 kg/m²], obese women (BMI 30.0-39.9 kg/m²), and extremely obese women (BMI ≥ 40.0 kg/m²) were compared to women of normal weight (BMI 18.5-24.9 kg/m²) who delivered a singleton pregnancy at term (37.0-41.9 weeks' gestation). Women were classified by pre-pregnancy BMI. Postpartum hemorrhage was defined as an estimated blood loss of >500 ml following vaginal delivery or >1,000 ml following Cesarean delivery. Multivariate analysis was performed controlling for maternal age, race, parity, mode of delivery, fetal macrosomia (>4,000 grams), polyhydramnios, magnesium sulfate administration, clinical chorioamnionitis, mode of delivery, and episiotomy. χ^2 and Fisher's exact tests were used for categorical variables. Statistical significance was set at a p -value of < 0.05 .**RESULTS:** A total of 6,865 women were included in the analysis: 788 (11.5%) had normal BMI, 2,161 (31.5%) were overweight, 2,965 (43.2%) were obese, and 951 (13.8%) were extremely obese. Extremely obese women were significantly more likely to experience PPH than women of normal weight [OR 1.8, 95% confidence interval (CI) 1.05-3.12, $p = 0.0328$]. There was no significant difference among overweight (OR 1.2, 95% CI 0.73-2.01, $p = 0.4620$) or obese women (OR = 1.2, 95% CI 0.74-1.99, $p = 0.4392$) compared to women of normal weight.**CONCLUSION:** Extremely obese women are at a higher risk of postpartum hemorrhage compared to women with normal BMI. Even a modest decrease in pre-pregnancy BMI can reduce this risk.**99 Obstetrical outcomes in women with epilepsy enrolled in the North American Antiepileptic Drug Registry (NAAPR)**Autumn Klein¹, Hillary Keenan², Robert Mittendorf³, Sonia Hernandez-Diaz⁴, Page Pennell⁵, Nichelle Llewellyn⁵, Caitlin Smith⁶, Lewis Holmes⁶, Thomas McElrath⁷¹University of Pittsburgh Medical School, Neurology and Obstetrics and Gynecology, Pittsburgh, PA, ²Joslin Diabetes Center, Genetics and Epidemiology, Boston, MA, ³Loyola University, Obstetrics and Gynecology, Chicago, IL, ⁴Harvard School of Public Health, Epidemiology, Boston, MA, ⁵Harvard Medical School, Neurology, Boston, MA, ⁶Harvard Medical School, Pediatrics, Boston, MA, ⁷Harvard Medical School, Obstetrics and Gynecology, Boston, MA**OBJECTIVE:** Little is known about obstetrical and neonatal outcomes in women with epilepsy (WWE) taking antiepileptic drugs (AEDs). This study aims to determine the rate of C-section (CS) in WWE on AEDs compared to women without epilepsy not taking an AED (WWoE) and to determine if there is an indication for CS, including seizure.**STUDY DESIGN:** The NAAPR, which began in 1997, is a voluntary call-in registry of pregnant women taking AEDs. Participants are asked a series of questions twice during pregnancy and once postpartum. We determined how many WWE and WWoE reported having a CS and classified their responses into different indications. WWE were compared to WWoE.**RESULTS:** There were 6,253 WWE reporting AED use at the time of last menstrual period and 469 WWoE. WWE were slightly younger (29.5 ± 5.4 v. 31.5 ± 4.1 years) ($p < 0.001$) and were less likely to have had a previous delivery (parity 0.8 ± 0.9 v. 1.0 ± 0.9 , $p < 0.001$), but were likely to have had an equal number of pregnancies (gravidas 2.2 ± 1.3 v. 2.3 ± 1.3 , $p = 0.1$). WWE were more likely to report smoking during the first trimester (14.1% v. 6.8%, $p < 0.05$). There was a higher proportion of whites among WWoE ($p < 0.001$), and the most common AEDs were lamotrigine (26.1%) followed by carbamazepine (22.9%). A total of 34.5% of WWE had a CS as compared to 29.8% of WWoE ($p = 0.05$), but when adjusted for age, parity and pre-existing hypertension, these findings are no longer significant (OR: 1.03 95% CI: 0.54, 2.0, $p = 0.9$). Of WWE, 10.5% reported seizure as a reason for their CS.**CONCLUSION:** There is borderline difference in the rate of CS between WWE and WWoE when adjusted for the confounders of age, parity, and pre-existing hypertension. Seizure was reported as an indication for CS in a significant number of WWE and suggests that WWE may benefit from specialized multi-disciplinary care at larger hospitals. Future studies will examine other obstetrical and neonatal outcomes including CS and SGA by AED.**100 Comparing estimated fetal weight by ultrasound and clinical assessment with actual birthweight**Benjamin Solomon¹, GERALYN O'Reilly¹, Pedro Arrabal¹, David Schwartz¹, Stephen Contag¹¹Sinai Hospital of Baltimore, Obstetrics and Gynecology, Baltimore, MD**OBJECTIVE:** To evaluate if there is a significant difference between two antepartum methods of estimating fetal weight immediately before birth and the actual birthweight.