251 CORRELATION OF TRANSTHORACIC ECHOCARDIOGRAPHY AND RIGHT HEART CATHETERIZATION IN PREGNANCY BLAIR JOHNSON[1], KELLY EPPS[2], SREEDHAR GADDIPATI[1], CAROL WAKSMONSKI[1], [1]Columbia University, New York, New York, [2]Johns Hopkins University, Baltimore, Maryland

OBJECTIVE: 1) To correlate estimates of pulmonary artery pressures (PAPs) by echocardiography with measurement by right heart catheterization (RHC). 2) To correlate estimates of left ventricular ejection fraction (EF) by echocardiography with cardiac output (CO) measurements by RHC.

STUDY DESIGN: A retrospective cohort of all pregnant women who underwent RHC at a single institution during pregnancy or whose delivery was managed with the aid of a PA catheter from January 2000 to July 2006 was analyzed. Right ventricular systolic pressures estimated by echocardiogram were compared with RHC peak systolic PAPs by correlation. Similarly, the correlation between estimated EF and measured CO was evaluated. The time interval between echocardiography and RHC, interval medications, gestational age, hemoglobin, and BMI were assessed as possible confounders using linear regression techniques.

RESULTS: A total of 18 patients underwent 21 RHCs, 10 antepartum and 11 intrapartum. Correlation between PAP and RVSP was high (Pearson's rho = 0.79; $p < 0.0001$) whereas there was no correlation between CO and EF (Pearson's rho = −0.01224; $p = 0.9655$). Covariates did not confound either relationship. Despite good statistical correlation for PAP estimation, in 30% of antepartum cases RHC eliminated the concern for pulmonary hypertension (pHTN) and in an additional 20% of the cases upclassified the severity of the pHTN.

CONCLUSION: Echocardiography provides a reasonable noninvasive estimation of PAP. Nonetheless, given clinical reclassification in 50% of the cases, RHC should be considered for major clinical recommendations such as termination of pregnancy or preterm delivery. Echocardiographic estimates of EF provide a poor proxy for CO. Other modalities may be more useful in assessing maternal myocardial function and predicting obstetric outcome when cardiomyopathy is diagnosed.

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252 PSYCHOSOCIAL BURDEN OF HYPEREMESIS GRAVIDARUM BORZOUYEH POURSHARIF[1], MARLENA S. FEJZO[1], KIMBER W. MACGIBBON[2], LISA M. KORST[1], ROBERTO ROMERO[3], T. MURPHY GOODWIN[1], [1]University of Southern California, Obstetrics and Gynecology, Los Angeles, California, [2]Hyperemesis Education and Research Foundation, Leesburg, Virginia, [3]NICHD, NIH, DHHS, Perinatology Research Branch, Detroit, Michigan

OBJECTIVE: The psychosocial burden of hyperemesis gravidarum (HG) has been described in several small case series. Our goal was to describe this burden in a large cohort, focusing on problems not previously reported in detail.

STUDY DESIGN: Women with HG described their pregnancy history in an open-ended qualitative survey administered internationally through an HG website during calendar years 2002-2003. The survey was not intended to be comprehensive, and some conditions may be under-reported.

RESULTS: Of the 505 women who completed the survey, 341 (68.1%) were American. Nearly all participants (87.7%) reported negative changes in the psychosocial or economic aspects of their lives as a result of having HG. Although these negative sequelae were described by each woman in detail, some of the problems experienced could be categorized into the following general areas: 1) perception of HG as a "devastating" or the "worst" experience in their lives (8.7%), 2) decreased physical activity level, e.g. impaired ability to perform housework or childcare (22.2%), 3) persistent physical problems, e.g. weight loss and altered eating habits (13.7%), some lasting into the postpartum period, 4) negative emotions toward their baby, family, or health care provider (7.1%), and 5) mental conditions such as feelings of depression and anxiety (15.8%), for some continuing on postpartum. The following severe social sequelae were reported: financial or career distress, job loss, divorce, and the need to change residence. Social dysfunction, marital dysfunction and family distress were also noted. Prominent attitude changes noted by these women included fear regarding future pregnancies among 21.2%, and an unwillingness to conceive again among an additional 15.4%.

CONCLUSION: Nearly 90% of a large cohort of women who experienced HG pregnancies described a negative psychosocial or economic impact as a result of their condition.

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253 FACTORS INVOLVED IN RESOLUTION OF PLACENTA PREVIA DIAGNOSED ON SECOND TRIMESTER ULTRASOUND BRIAN WAGNER[1], RODNEY WRIGHT[1], JOHN ILAGAN[1], PETER S. BERNSTEIN[1], [1]Albert Einstein College of Medicine/Montefiore Medical Center, Obstetrics & Gynecology and Women's Health, Bronx, New York

OBJECTIVE: Placenta previa is commonly diagnosed on second trimester ultrasounds causing patient and provider anxiety. Our objective was to determine factors associated with the persistence of placenta previa diagnosed on prenatal ultrasound in order to guide patient counseling.

STUDY DESIGN: A retrospective cohort review was performed on all patients diagnosed with placenta previa and marginal placenta previa on ultrasound from 2003 to 2005. Using the AS-OBGYN computerized patient record, those patients with the terms "placenta previa" or "marginal placenta previa," within the ultrasound reports were identified. A medical records review was then undertaken to identify those factors that are related to the resolution or continuance of the previa. Information including type of previa, gestational age at diagnosis, maternal age, parity, previous uterine surgery including cesarean delivery, curettage and myomectomy, race and smoking history were recorded.

RESULTS: 532 patients were identified and after exclusion for incomplete data collection, 511 records were available for this analysis. In univariate analysis, later mean gestational age at diagnosis (22.5 ± 5.52 v. 19.1 ± 3.79 weeks, $p < 0.04$), smoking (OR 8.14; 95% CI 4.18,15.92), complete previa (OR 16.98; 95% CI 9.36, 30.95), multiparty (OR 3.81; 95% CI 2.02-7.28), previous uterine curettage (OR 1.62; 95% CI 1.01, 2.62) and previous cesarean delivery (OR 16.98; 95% CI 7.93, 24.15) were all independent risk factors for persistence of placenta previa to delivery. In a multivariate analysis, only later gestational age at diagnosis, complete previa and previous cesarean delivery remained risk factors for persistence until delivery.

CONCLUSION: Type of placentation, history of prior cesarean delivery, and gestational age at diagnosis are all important factors that modify the risk that a previa will persist to delivery. Using these risk factors providers may be able to individualize patient counseling on the risk of persistence of placenta previa diagnosed during second trimester ultrasounds.

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254 MIDPELVIC DELIVERIES: WHAT IS THE ASSOCIATION BETWEEN MODE OF DELIVERY AND PERINATAL OUTCOMES? BRIAN L. SHAFFER[1], YVONNE W. CHENG[1], AARON B. CAUGHEY[1], [1]University of California, San Francisco, Obstetrics, Gynecology and Reproductive Sciences, San Francisco, California

OBJECTIVE: To compare forceps, vacuum, and cesarean delivery and associated perinatal outcomes in those undergoing midpelvic deliveries.

STUDY DESIGN: We performed a retrospective cohort of all women in the second stage of labor in which the fetal occiput was engaged at the 0 or +1 station. We examined mode of delivery as a predictor of maternal and neonatal morbidity. Statistical comparisons were made using the χ^2 test.

RESULTS: Of the 943 women who had a midpelvic delivery, 35 (3.7%) underwent forceps and 43 (4.6%) vacuum assisted vaginal delivery, while the remaining 865 (91.7%) women were delivered by cesarean. Cephalohematoma, shoulder dystocia and brachial plexus injury were all more common in those delivered by vacuum compared with forceps or cesarean. More than one-half of women undergoing midpelvic forceps delivery had a third or fourth degree perineal laceration. Compared to opeartive vaginal delivery, cesarean delivery was associated with an increase in rate of postpartum hemorrhage.

CONCLUSION: In women who underwent a midpelvic delivery, vacuum was associated with increased rates of neonatal morbidity. Women who had forceps delivery had higher risks for severe perineal trauma and those who had cesarean were at higher risk for postpartum hemorrhage. This information may be helpful in counseling women regarding options of midpelvic delivery.

Midpelvic Deliveries: Perinatal Outcomes by Mode of Delivery

	Forceps n=(35)	Vacuum n=(43)	Cesarean n=(865)	p-value
Shoulder dystocia	2.9%	9.1%	0.3%	<0.001
Cephalohematoma	0%	11.4%	2.3%	<0.001
Erb's palsy	0%	2.3%	0%	<0.001
3rd/4th Laceration	54.3%	27.3%	0%	<0.001
Hemorrhage	42.9%	30.2%	52.8%	0.008

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