Healthcare disparities in placenta accreta population

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Study Objective: Maternal outcomes and healthcare disparities in the placenta accreta population: A Work in Progress (WIP) and Project Proposal

Design: Retrospective cohort study

Background:
In the obstetric (OB) population, healthcare disparities in maternal morbidity and mortality have been shown to exist in terms of race/ethnicity and socioeconomic status. Black women, when compared to non-Hispanic white women, have higher rates of pregnancy-related mortality as well as adverse obstetric outcomes such as postpartum hemorrhage, preeclampsia, peripartum infection, primary cesarean section, placental abruption, placenta previa, and higher odds of receiving general anesthesia for cesarean delivery [1-3]. Even among the Medicaid population, black women have higher rates of pregnancy-related morbidity compared to white and Hispanic Medicaid patients [4]. While all of these studies endorse healthcare disparities in the general obstetric population, there is a paucity of research showing disparate outcomes amongst the placenta accreta population. Given that the placenta accreta population differs from the general obstetric population in terms of baseline demographics, past medical history, and ASA status we sought to examine the healthcare disparities present in this population alone by examining associations between insurance status, race, and median income with maternal peripartum outcomes [5-7]. A PubMed literature search using the Medical Subject Headings to extract articles on this topic did not reveal any relevant articles, demonstrating the need for this investigation. We hypothesize that black, low socioeconomic, and uninsured patients with placenta accreta have worst maternal outcomes.

Methods:
For this project, we will conduct a retrospective analysis using hospitalization and discharge records of patients >18 years of age from the State Inpatient Databases (SID) of New York, Florida, and California (about 25% of the United States population), Healthcare Cost and Utilization Project, Agency for Healthcare Research and Quality. Records from the SID were retrospectively identified from January 2007 to December 2011 for patients who underwent vaginal (N=2,818,289), operative (N=212,324), and cesarean section delivery (N=1,561,201). For statistical analysis, we will first compare the characteristics of the placenta accreta cohort (defined by ICD-9 codes 66600, 66602, 66604, 66700, 66702, 66704, 66710, 66712, and 66714) to the normal pregnancy cohort. We hypothesize that this will demonstrate baseline differences in demographics and comorbidities between these populations. We then plan to compare outcomes in the placenta accreta cohort alone, based on insurance payer status (Medicaid, Medicare, Private, Other, Uninsured),
race/ethnicity (White, Black, Hispanic, Other), and median income by zip code divided into quartiles. We plan to perform bivariate and multivariate logistic and linear regression analysis. We will report odds ratios (OR) with robust 95% Confidence Intervals, with an alpha value selected a priori of 0.05.

Results/Conclusions: Analysis to be performed in upcoming months.

References: