Maryland Maternal Mortality Review Workgroup
Updates and Management Guidelines Regarding Pregnancy Induced Hypertensive Disease and Preeclampsia

In 2014, the Maryland Maternal Mortality Review (MMR) Committee reviewed 29 cases. Substance abuse, cardiomyopathy, and preeclampsia were collectively found to have been leading causes of maternal death from 2007-2012. The MMR Committee has decided to focus its recommendations on these leading causes, in which an impact could be made in the health-care system, particularly during the post-partum period.

Specifically, regarding preeclampsia and hypertensive disease of pregnancy, we recommend the following for immediate implementation to help prevent maternal mortality:

1. All obstetric patients should be educated about the risks, symptoms and signs of preeclampsia; women with a history of preeclampsia requiring iatrogenic delivery before 34 weeks or of preeclampsia in more than one previous pregnancy may be started on ASA 81 mg in the late first trimester.

2. Patients with preeclampsia with severe features, who are being induced, should make progress toward delivery within 24 hours or less (with confirmation of fetal presentation prior to induction as standard practice).

3. Patients presenting with preeclampsia requiring immediate delivery should be stabilized prior to transfer to the operating room; this includes the administration of a magnesium sulfate bolus and lowering blood pressure out of the severe range (systolic pressure greater than 160 or diastolic pressure greater than 110). Magnesium administered for seizure prophylaxis should not be routinely held intraoperatively or surrounding delivery.

4. Patients with preeclampsia should be monitored for 72 hours postpartum and should have a visit within 1 week of discharge from the delivery hospital to assess for risk of blood pressure elevation and severe postpartum preeclampsia.

These recommendations and the Preclampsia definition below are supported by and attributed to recent ACOG recommendation: American College of Obstetricians and Gynecologists; Task Force on Hypertension in Pregnancy. Hypertension in pregnancy. Report of the American College of Obstetricians and Gynecologists' Task Force on Hypertension in Pregnancy. Obstet Gynecol. 2013 Nov;122(5):1122-31.

Diagnostic Criteria for Preeclampsia

Blood pressure:
-Greater than or equal to 140 mm Hg systolic or greater than or equal to 90 mm Hg diastolic on two occasions at least 4 hours apart after 20 weeks of gestation in a woman with a previously normal blood pressure
-Greater than or equal to 160 mm Hg systolic or greater than or equal to 110 mm Hg diastolic, hypertension can confirmed within a short interval (minutes) to facilitate timely antihypertensive therapy

~AND~

Proteinuria:
-Greater than or equal to 300 mg per 24-hour urine collection *(or this amount extrapolated from a timed collection*)
or
-Protein/creatinine ratio greater than or equal to 0.3 mg/dL
-Dipstick reading of 1+ *(used only if other quantitative methods not available)*

Or in the absence of proteinuria, new-onset hypertension with the new onset of any of the following:
-Thrombocytopenia: Platelet count less than 100,000/microliter
-Renal insufficiency: Serum creatinine concentrations greater than 1.1 mg/dL or a doubling of the serum creatinine concentration in the absence of other renal disease
-Impaired liver function: Elevated blood concentrations of liver transaminases to twice normal concentration
-Pulmonary edema
-Cerebral or visual symptoms