Lecture 2: “Preeclampsia Etiologies, Prevention and Management”

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Preeclampsia a disorder that complicates approximately 5% of pregnancies. Several risk factors for this condition are well recognized including nulliparity, extremes of maternal age, obesity, and preexisting diabetes or hypertension. Etiology of this disease remain unclear. Preeclampsia is a major cause of maternal and fetal death and the leading cause of mature delivery worldwide. Recently studies have suggested that circulating angiogenic factors, alterations in the renin-angiotensin system, and insulin resistance may be involved in pathogenesis. Complications of preeclampsia include stroke, renal failure, and placental abruption. There is also increased evidence that the development of preeclampsia may be a marker for maternal disease risks later in life including hypertension, stroke, ischemic heart disease and end stage renal disease. Magnesium sulfate is used before and after delivery in women with mild and severe preeclampsia to prevent eclamptic seizures. Magnesium sulfate has been shown to be more effective than Phenytoin {Dilantin} in the prevention of recurrent eclamptic seizures. Recently in the Society of Maternal Fetal Medicine, Magnesium sulfate usage was a neuroprotective in premature babies. Trials of Vitamin C and E administration for preeclampsia have shown variable affect. The use of Calcium as well as aspirin has also shown variable results. Prevention of Eclampsia is a major goal in the treatment of preeclampsia. Although the management of preeclampsia is delivery of the baby and removal of the placenta. However, patients with mild preeclampsia remote from term have been managed conservatively and this includes antihypertensive medications, steroids to mature the baby’s lungs, and hospitalization to closely monitor the maternal condition.

References:

4) Mounira Habli, M.D. et al. Neonatal outcomes in pregnancies with preeclampsia or gestational hypertension; and in normotensive pregnancies that delivered at 35, 36, or 37 weeks gestation. AJOG October 2007