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**Intraoperative Eclampsia and Posterior Reversible Encephalopathy Syndrome**

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**Abstract Body:** The patient is a 32 year old G3P2 presenting for elective repeat caesarian section at 37 weeks gestation. The patient's prenatal care was sporadic and was provided at an outside facility. A complete record of the patient's prenatal visits was unavailable at the time; however there was concern about possible preeclampsia based upon a trace urine dipstick test and complaints of headaches during this pregnancy. Noninvasive blood pressure measurements during prenatal visits were well below criteria for preeclampsia. House obstetrical staff were not under the impression that the patient was suffering from preeclampsia.

On the date of admission, a thorough anesthesia pre-operative evaluation including history, physical, and consent were obtained through an interpreter. Of note, the patient's blood pressure was noted to be above her baseline in excess of 20% (however still below 140/90), and a complaint of headache was noted. The remainder of the pre-operative evaluation was unremarkable. A plan for neuraxial anesthesia with a single dose spinal anesthetic was made.

A single dose spinal anesthetic was performed and a T4 level was obtained. Hypotension was treated with incremental vasopressors. The patient exhibited an exaggerated response to exogenous catecholamines. Marked reflex bradycardia was treated with atropine. Sinus tachycardia with ST depressions were noted shortly after treatment. At the same time the patient became unresponsive and apneic with tonic clonic movements noted. The patient was intubated, a radial arterial line placed, and efforts to restore hemodynamic stability were initiated. Once the fetus was delivered and hemodynamic stability resumed, the patient was taken to the CT scanner. CT imaging of the brain was negative for any acute processes. The patient was then transferred to the ICU intubated. The etiology of the seizure was initially attributed to acute intraoperative hypertension and not eclampsia. Shortly after extubation, with normal hemodynamics, the patient again had a grand mal seizure. IV magnesium therapy was initiated and a consult to neurology was made. MRI imaging revealed PRES (posterior reversible encephalopathy), secondary to eclampsia.

PRES is a clinicoradiologic syndrome often associated with eclampsia. The pathophysiology is related to hypertension related failure of autoregulation in the parieto-occipital lobes leading to endothelial dysfunction, vasogenic edema and seizures. This case is notable for several reasons. First, it showcases an interesting presentation of eclampsia (intraop seizures and exaggerated response to exogenous catecholamines). Second it shows that a patient, even with "normal" blood pressures can have preeclampsia if elevated above their baseline. Third, it brings up PRES, a unique finding in eclampsia that many providers may be unfamiliar with. Fourth, late postpartum eclampsia can occur without the usual preeclamptic prodrome.