Emergency Craniotomy and Emergency C-Section in an Eclamptic Parturient

Abstract Type: Case Report/Case Series
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Introduction: Preeclampsia and eclampsia are the leading causes of maternal and perinatal mortality and morbidity worldwide.

Case Report: We describe the case of a 33 year old female that required an emergency c-section as well as an emergency craniotomy due to severe eclampsia. She had no history of pre-eclampsia and had an otherwise normal pregnancy. She was at the market when she complained that she felt dizzy and needed to rest. The patient then seized and became unresponsive. Paramedics were called and she was intubated in the ambulance and brought to our hospital. At the time her blood pressure was 200/120 according to EMS documentation. Patient had a CT scan on the Head which showed a 7.5 x 3.7 cm intraparenymal hemorrhage in the right frontotemporalparietal subcortical area with a 1.2 cm midline shift to the left. Patient was started on magnesium sulfate, propofol, mannitol and, dilantin in the ER.

Neurosurgery, OB-GYN, and pediatrics were informed and patient was brought to the OR.

A large bore IV and arterial lines were inserted. Initial vital signs in the OR were 190/90, pulse was 150. Patient underwent right hemicraniectomy. Balanced anesthesia was maintained with vecuronium, a propofol drip (100 mcg/kg/min) and a remifentanyl drip (0.5 mcg/kg/min) Patient was continued her mannitol, dilantin, and magnesium drips. Vent settings were maintained to keep the ETCO2 between 28 and 30 with a TV of 500 and respiratory rate of 12. Following the hemicraniectomy, patient had a primary c section and a healthy baby boy was delivered with Apgar scores of 6 and 9.

Initial ABG: 7.38/29.3/311/99 with a HCT of 40 and a lactate of 1.1 and bicarb of 18.2. Patient tolearated the procedures and she was transferred to SICU intubated. Post op vital signs in SICU HR 92, BP 131/69.

Post Op Course: The patient remained intubated and was transferred to SICU and remained there for 2 weeks. She was extubated after 8 days. On June 26, a month after her admission, the patient was transferred to rehabilitation center. Her son had no impairments. She had closure of the skull defect on october 20th.

Discussion: Eclampsia has a maternal mortality rate of ~4% and a perinatal mortality rate of 13-30%. Seizures occur antepartum in 50% of patients, intrapartum in 25% and postpartum in 25%

Magnesium IS THE GOLD STANDARD for prophylaxis. In large randomized clinical trials, magnesium has been proven superior to placebo, phenytoin, diazepam and nimodipine. Management consists of high flow supplemental oxygen, left or right lateral decubitus position, immediate availability of suction, small doses of propofol or thiopental, additional 2 gram magnesium sulfate bolus. Monitor the fetus if possible. Major maternal complications of eclampsia include aspiration, pulmonary edema, CVA, acute renal failure and death. High perinatal death rate is reported in eclamptic women and placental abruption, extreme prematurity and severe IUGR are the causes.