PREVALENCE OF ECLAMPSIA AMONG PATIENTS PRESENTING IN OBSTETRICS DEPARTMENT

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ABSTRACT:
Eclampsia is the onset of seizures (convulsions) in a woman with pre-eclampsia. Pre-eclampsia is a disorder of pregnancy in which there is high blood pressure and either large amounts of protein in the urine or other organ dysfunction.

This cross-sectional study was conducted among patients presenting in obstetrical clinics in different hospital. Name, age, maternal and gestational age, presence, or absence of eclampsia were noted a predefined proforma. All the data was entered and analyzed with SPSS Ver. 23.0. There were 120 patients included in this study. The mean maternal age of the patients was 28.93±2.23 years and the mean gestational age was 8.12±0.22 months. Out of 120 patients, only 7 patients had history of eclampsia. Six patients had history in previous pregnancy. None of the patients experienced further complications.

KEYWORDS: ECLAMPSIA
INTRODUCTION:
Eclampsia is the onset of seizures (convulsions) in a woman with pre-eclampsia. Pre-eclampsia is a disorder of pregnancy in which there is high blood pressure and either large amounts of protein in the urine or other organ dysfunction. Onset may be before, during, or after delivery. Most often it is during the second half of pregnancy. The seizures are of the tonic–clonic type and typically last about a minute. Following the seizure there is typically either a period of confusion or coma. Complications include aspiration pneumonia, cerebral hemorrhage, kidney failure, pulmonary oedema, HELLP syndrome, coagulopathy, abruptio placentae and cardiac arrest. Pre-eclampsia and eclampsia are part of a larger group of conditions known as hypertensive disorders of pregnancy. Recommendations for prevention include aspirin in those at high risk, calcium supplementation in areas with low intake, and treatment of prior hypertension with medications. Exercise during pregnancy may also be useful. The use of intravenous or intramuscular magnesium sulfate improves outcomes in those with eclampsia and is generally safe. This is true in both the developed and developing world. Breathing may need to be supported. Other treatments may include blood pressure medications such as hydralazine and emergency delivery of the baby either vaginally or by cesarean section.

Eclampsia, like pre-eclampsia, tends to occur more commonly in first pregnancies. Women who have long term high blood pressure before becoming pregnant have a greater risk of pre-eclampsia. Furthermore, women with other pre-existing vascular diseases (diabetes or nephropathy) or thrombophilic diseases such as the antiphospholipid syndrome are at higher risk to develop pre-eclampsia and eclampsia. Having a large
placenta (multiple gestation, hydatidiform mole) also predisposes women to eclampsia. In addition, there is a genetic component: a woman whose mother or sister had the condition is at higher risk than otherwise. Women who have experienced eclampsia are at increased risk for pre-eclampsia/eclampsia in a later pregnancy. People of certain ethnic backgrounds can have an increased risk of developing pre-eclampsia and eclampsia. The occurrence of pre-eclampsia was 5% in white, 9% in Hispanic, and 11% in African American women. Black women were also shown to have a disproportionately higher risk of dying from eclampsia (1-3). The objective of this study was to see the prevalence of eclampsia among patients presenting in obstetrical clinics in different hospital. Name, age, maternal and gestational age, presence, or absence of eclampsia were noted a predefined proforma. All the data was entered and analyzed with SPSS Ver. 23.0. The quantitative variables were presented as mean and standard deviation. The qualitative variables were presented as frequency and percentages.

RESULTS:
There were 120 patients included in this study. The mean maternal age of the patients was 28.93±2.23 years and the mean gestational age was 8.12±0.22 months. Out of 120 patients, only 7 patients had history of eclampsia. Six patients had history in previous pregnancy. None of the patients experienced further complications.

DISCUSSION:
The presence of a placenta is required, and eclampsia resolves if it is removed. Reduced blood flow to the
placenta (placental hypoperfusion) is a key feature of the process. It is accompanied by increased sensitivity of the maternal vasculature to agents which cause constriction of the small arteries, leading to reduced blood flow to multiple organs. Vascular dysfunction-associated maternal conditions such as Lupus, hypertension, and renal disease, or obstetric conditions that increase placental volume without an increase in placental blood flow (such as twin pregnancy) can increase risk for pre-eclampsia. Also, an activation of the coagulation cascade may lead to microthrombi formation, which can further impair blood flow. Thirdly, increased vascular permeability results in the shift of extracellular fluid from the blood to the interstitial space, with further reduction in blood flow, and edema. These events lead to hypertension; renal, pulmonary, and hepatic dysfunction; and cerebral edema with cerebral dysfunction and convulsions. Before symptoms appear, increased platelet and endothelial activation may be detected.

Placental hypoperfusion is linked to abnormal modelling of the fetal–maternal placental interface that may be immunologically mediated. Pre-eclampsia’s pathogenesis is poorly understood, but it likely is attributed to factors related to the mother and placenta, because pre-eclampsia is seen in molar pregnancies absent of a fetus or fetal tissue. The placenta produces the potent vasodilator adrenomedullin: it is reduced in pre-eclampsia and eclampsia. Other vasodilators are also reduced, including prostacyclin, thromboxane A2, nitric oxide, and endothelins, also leading to vasoconstriction.

Eclampsia is a form of hypertensive encephalopathy: cerebral vascular resistance is reduced, leading to increased blood flow to the brain, cerebral edema and resultant convulsions. An eclamptic convulsion usually does not cause chronic brain damage unless
intracranial haemorrhage occurs. If a pregnant woman has already been diagnosed with pre-eclampsia during the current pregnancy and then develops a seizure, she may be assigned a 'clinical diagnosis' of eclampsia without further workup. While seizures are most common in the third trimester, they may occur any time from 20 weeks of pregnancy until 6 weeks after birth. A diagnosis of eclampsia is most likely given the symptoms and medical history, and eclampsia can be assumed to be the correct diagnosis until proven otherwise. However, if a woman has a seizure and it is unknown whether or not she has pre-eclampsia, testing can help make the diagnosis clear (4-6).

REFERENCES: