

Eclampsia: how to optimize maternal outcomes? Experience of a referral centre

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Objective. Eclampsia is the occurrence of seizure during pregnancy or puerperium, and remains one of the major causes of maternal morbidity and mortality with an incidence of 1.6 to 10/10,000 deliveries in developed countries. According to the INOSS report, 45% of maternal eclampsia-related deaths could be prevented with appropriate care. Our aim was to describe the current management of eclampsia and to identify the most frequent clinical errors to improve maternal outcomes.

Materials and Methods. We performed a monocentric retrospective study on 7 cases which occurred between January 2016 and January 2021 at Careggi University Hospital, Florence. We analyzed medical history, course of pregnancy, characteristics of seizure, management, and maternal and fetal outcomes.

Results. Five cases occurred before delivery, 2 in postpartum. In 3 pre-partum cases, delivery was performed with an emergency cesarean section in general anesthesia.

Pharmacological treatment for hypertension and prevention of recurrence of seizures with Magnesium Sulfate resulted appropriate according to international guidelines.

The standard sequence of acute care during the seizure, stabilization of maternal conditions followed by delivery was not respected. In all pre-partum cases managed with emergency cesarean section, we found negative maternal outcomes: two cases of PRESS (Posterior-Reversible-Encephalopathy-Syndrome) and one case of maternal respiratory failure. Our data are consistent with the INOSS report.

Conclusions. Management of eclampsia is currently not appropriate, with consequent poor maternal outcomes.

Considering the rarity of this condition an adequate and recurrent staff training would be necessary. In fact better outcomes would be obtained by optimizing prenatal and intrapartum care.