ABSTRACT

Study title:

FETOMATERNAL OUTCOME IN HELLP SYNDROME COMPLICATING PREGNANCY

Background:

HELPP syndrome is a severe complication of preeclampsia and Eclampsia with high risk for mother and fetus. It comprises of hemolysis, elevated liver enzymes and low platelet count. HELLP is an acronym coined by Weinstein in 1982. In HELLP syndrome there is high maternal and perinatal morbidity due to under diagnosis and delayed treatment of preeclampsia. The developed nations have achieved great success in combating HELLP syndrome and the research activities today focuses on the early predictors of preeclampsia but developing nations have long way to go.

Objectives:

The objective of this study is to detect and evaluate the fetomaternal outcome in HELLP syndrome complicating pregnancy. To study the incidence of HELLP syndrome, to analyse the clinical profile of HELLP syndrome cases, to study the maternal and perinatal outcome including morbidity and mortality

Methods and materials:

Case sheets from the Medical records department in institute of obstetrics and gynaecology, Egmore, Chennai from period of JUNE 2013 to May 2015

A retrospective analysis was done in 86 patients who were diagnosed as HELLP syndrome complicating pregnancy and admitted in Department of Obstetrics and gynaecology, Institute of obstetrics and Gynaecology, Madras Medical College.

A complete review of all clinical case sheets were undertaken regarding the clinical history, examination and diagnostic investigations. Various factors whether independent or dependent were identified which were related to the mortality and morbidity of the fetus and the mother
Results:

During the study period July 2013 to June 2015, there was about 75 cases of maternal death. Of which 28 cases were due to HELLP Syndrome. This contributes to $1/3^{rd}$ of the total maternal deaths. Among the 86 patients of HELLP syndrome 54 were referred from other hospitals in which IOG was found to be $3^{rd}$ or $4^{th}$ referral centre.

Our study calculated the prevalence of HELLP syndrome as (2.6%) while the prevalence of partial HELLP as (2.08%). Significant association was found between serum bilirubin values and maternal death. Values $>$2.2 is more associated with the higher incidence of maternal death. Sensitivity of association between SGOT and the incidence of maternal death was found to be 82.1%. Serum bilirubin level of above 2.3mg/dl is associated with a higher incidence of IUD. It was found that LDH value of more than 2320 was significantly associated with higher incidence of IUD. Most of the patients in our study were Multigravida (53%) and less than 25 years old. Values of LDH above 2557 was found to be significantly associated with the higher incidence of LBW. The cesarean section rate in HELLP and partial HELLP syndrome were very high in our study as the pregnancy was terminated as soon as the disease was diagnosed to avoid worsening of maternal and perinatal outcomes. Placental abruption corroborated with the bad perinatal prognosis in both HELLP and partial HELLP syndrome. In our study DIVC was found to be most common complication. The rate of eclampsia in HELLP syndrome group and partial HELLP syndrome group were significantly higher as shown in our study.

Conclusion:

Most of the deaths are due to underdiagnosis and delayed diagnosis and patients being referred during late stages when the patients develop complete HELLP syndrome where there is more morbidity and mortality. Proper education of the health personnel about the signs and symptoms, proper routine antenatal check up and warning signs and symptoms and laboratory investigations can be much helpful to make an early diagnosis and management and thus preventing and decreasing the incidence of maternal deaths.

KEY WORDS:

Pre eclampsia, HELLP syndrome, partial HELLP syndrome.