

COMPARISON OF MATERNAL AND PERINATAL COMPLICATIONS AT <34 and ≥34 WEEKS GESTATION IN SEVERE PREECLAMPSIA AND HELLP SYNDROME IN WAHIDIN SUDIROHUSODO HOSPITAL MAKASSAR

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INTRODUCTION: Globally, pre-eclampsia and eclampsia account for 10%–15% of maternal deaths. The majority of deaths in developing countries result from eclampsia, while in developed countries, complications of pre-eclampsia (HELLP syndrome, eclampsia, DIC, renal failure, pulmonary oedema) are more often the cause.

AIM: To evaluate maternal and perinatal complications associated with severe preeclampsia and HELLP Syndrome according to gestational age

MATERIAL AND METHODS: The retrospective study was carried out on 259 pregnant women with more than 20 weeks of gestation of severe preeclampsia and HELLP syndrome who were admitted in the Department of Obstetrics and Gynecology Wahidin Sudirohusodo Hospital. Both groups participants were divided into two groups <34 weeks and ≥ 34 weeks gestation: the severe preeclampsia group and the HELLP Syndrome group. We analyzed maternal and perinatal outcome from two groups. Fisher's exact test and Chi-square test were used as statistical methods.

RESULTS : There was no difference in maternal outcome between severe preeclampsia and HELLP syndrome unless cesarean delivery and length of stay was more common in HELLP syndrome cases. ($p < 0,030$; $p < 0,045$). We found a statistically significance difference in perinatal morbidity (low APGAR Score, Low birth weight, Intrauterine Death) in woman with severe preeclampsia < 34 weeks and low birth weight in woman with HELLP Syndrome < 34 weeks.

Table 1 Demographic characteristics, laboratory findings.

	< 34 weeks gestation		≥34 weeks gestation	
	Severe Preeclampsia 48 (59 %)	Severe Preeclampsia 147 (82,5 %)	HELLP Syndrome 33 (40 %)	HELLP Syndrome 31 (17,4 %)
Maternal age	30,4±6,54	29,98±7,37	36±5,92	30,2±6,06
Gravidity	2±1,48	2,34±1,71	3±1,76	2±1,40
Parity	1 ±1,05	1±1,19	1±1,32	1±1,18
Gestational Age	30,917±2,62	37,86±2,23	33,6±2,68	37,21±2,20
ALT (IU/L)	32,43±30,68	34,32±31,52	202±251	218,93±241,60
AST (IU/L)	24,375±41,04	23,25±38,48	114,152±90,20	132,90±119,93

Table 2 Maternal Outcome

	Severe Preeclampsia (n=195)			HELLP Syndrome (n= 64)		
	<34 weeks (48)	≥34 weeks (147)	<i>P value</i>	<34 weeks (33)	≥34 weeks (31)	<i>P value</i>
Eclampsia	9 (18,7 %)	38 (25,8 %)	0,793	5 (15 1 %)	10 (32,2 %)	0,248
Abruptio Placenta	-	2 (1,36 %)	■	-	-	■
Acute Renal Failure	-	2 (1,36 %)	■	■	1 (3,2 %)	■
Caesarian Delivery	39 (81%)	104 (70,7 %)	0,125	21 (63,6 %)	27 (87 %)	0,030
Pulmonary oedema	1 (2 %)	3 (2 %)	-	-	1 (3,2 %)	■
Maternal death	-	■	-	1	-	■
Length of stay in hospital (days)	5,0 ±1,43	4,7±1,52	0,210	5,6±2,17	4,6±1,27	0,045
Admission in ICU	10 (20 %)	33 (25 %)	0,973	13 (40 %)	10 (33 %)	0,552

Table 3 Perinatal Outcome

	Severe Preeclampsia (n=195)			HELLP Syndrome (N=64)		
	< 34 weeks gestation (n=48)	≥ 34 weeks gestation (n=147)	<i>P value</i>	< 34 weeks gestation (n=33)	≥ 34 weeks gestation (n=31)	<i>P value</i>
Fetal Distress	2 (4,1%)	10 (6,80%)	0.399	3 (9%)	5 (16,1%)	0.665
Low Apgar Score	19 (39,5 %)	38 (25,8%)	0.014	17 (51%)	16 (51,6%)	0.211
Low Birth Weight	43 (89,5 %)	65 (44,2)	0.000	32 (96,9 %)	25 (80,6 %)	0.043
Intrauterine Death	8 (16%)	11 (7,4%)	0.014	7 (21%)	3 (9,6%)	0.211

CONCLUSIONS : In our research, some maternal adverse outcomes were similar between <34 weeks and >34 weeks severe preeclampsia unless caesarian delivery and length of stay more frequent in HELLP syndrome cases. Infant morbidity and mortality are higher in <34 weeks compared >34 weeks. Therefore, expectant management of women with severe preeclampsia occurring < 34 weeks gestation may improve perinatal outcomes.

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