



# Expectant Management in Severe Preeclampsia

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Maternal and perinatal outcome of expectant management was studied in 52 women with severe preeclampsia admitted between 24-34 weeks of gestation. Pregnancies could be prolonged by an average of 9 days and the average birth weight was 1238 gm (SD 338). The overall perinatal survival was 85.4% and it was 66% among babies weighing less than 1000 gm, suggesting that use of expectant management for pre-term severe preeclampsia is feasible in the Indian setup.

**Key words:** Severe preeclampsia; Expectant management



**Introduction:**

**T**raditionally, women with severe preeclampsia underwent a delivery immediately, regardless of the consequences of extreme fetal prematurity. Delaying this definitive management for severe preeclampsia to at least gain benefit of antenatal steroids and to organize resources for managing the anticipated complications, is referred to as **expectant management**. Such an approach has shown improved perinatal outcome without compromising the maternal well being in developed countries<sup>(1, 2, 3, 4)</sup>. The experience in an Indian rural based hospital is reported.


**Methods:**

Consenting 52 women between 24 and 34 weeks of pregnancy with severe preeclampsia were recruited for expectant management by avoiding immediate termination of pregnancy. Intensive monitoring for foeto-maternal wellbeing and antihypertensive(s) was continued. Institute ethics committee approval was obtained. Cases presenting any of the complications such as eclampsia, placental abruption, preterm labor, and intrauterine fetal death were not included in the study. Pregnancy was terminated after 34 weeks or earlier in case of any of the following (i) **uncontrolled hypertension**, (ii) **persisting or progressively deteriorating clinical symptoms or the biochemical markers** (iii) **occurrence of complications such as placental abruption, eclampsia, renal failure or significant retinopathy** (IV) **non-reassuring fetal status**.

**Results:**

The median gestational age at hospitalisation with severe preeclampsia was 30 weeks 1 day (SD 2.1; median 31 weeks; range 24 to 34 weeks). Of the 52 cases, thirty-three (63.4%) were aged less than 30 years and 23 were multigravidas (44%). Twenty-six patients had blood pressure beyond 160/110 mm Hg and 20 women (38.4%) had serum uric acid > 5 mg / dl. Proteinuria of >5 grams / 24 hours was present in 10 and significantly elevated liver enzymes 6 cases (19.2 and 11.5%, respectively). Two cases had rapidly falling platelet count, and one of them with the platelet count of < 1,00,000/cc. Imminent eclampsia was present in 6 cases and oliguria in 5 women (9.6%). There were 29 (55.7%) cases with evidence of fetal growth restriction. Pregnancies could be prolonged by an average of 9 days (SD 7.1) and the average birth weight was 1231 g (SD 319). Thirty-six women had cesarean

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delivery (69%), non-reassuring fetal status being the most common indication for termination of pregnancy (34.6%, 18 of 52).

The mean gestational age at delivery was 31.4 weeks (SD 2.0; median 32 weeks 2 days; range 24 to 36 weeks 5 days). There were eleven (21%) stillbirths in the group, five of them being ante-partum (after admission and before pregnancy termination). Two of the stillbirths were due to placental abruption. There were five cases of placental abruption, three of them with cesarean delivery including the one of grade 'O' abruption detected at sonography, had live births. Seventeen (32.7%)

of the babies were less than 1000 gm and 35 (67%) were weighing between 1000-2000 gm at birth. Eight newborns had poor Apgar scores of less than 5 at 1 and 5 min, but all survived.

There were six neonatal deaths (14.6% of 41 live births). Prolonged intensive neonatal care for more than 7 days was required for 33 of 41 (80%) newborns. Twenty-two neonates (53.6%) had serious morbidities (Table 1). Thirty-five mothers (67.3% of all cases; 85.4% of live births) went home with live babies. Two cases had post-partum eclampsia and one developed acute renal failure (1.9%). There was no maternal death.

**Table 1: Neonatal complications**

Complications†	n (%)	Birth weight	
		<1000g n (%)	<1000-2000g n (%)
No complications*	19 (46.3)	3 (25)	16 (55.1)
Respiratory distress syndrome	7 (17)	2 (16.7)	5 (17.2)
Intraventricular hemorrhage	2 (4.8)	1 (8.3)	1 (3.4)
Necrotising enterocolitis	1 (2.4)	1 (8.3)	1 (3.4)
Sepsis	5 (12.1)	1 (8.3)	4 (13.8)
Pulmonary hemorrhage	1 (2.4)	-	1 (3.4)
Jaundice	12 (29.2)	2 (16.7)	10 (34.5)
Seizures	2 (4.8)	1 (8.3)	1 (3.4)
Neonatal death	6 (14.6)	4 (33.3)	2 (6.8)
<b>Total</b>	<b>41</b>	<b>12</b>	<b>29</b>

† Some children had more than one complications

\*One neonate in each group required prolonged ventilatory support

## Discussion:

Prolongation of pregnancies from 7 to 15 days is reported.<sup>1,2</sup> The studies which recruited pregnancies below 29 weeks had higher perinatal deaths.<sup>3,4</sup> The outcome of pregnancies studied between 24-34 weeks period, have shown perinatal mortality varying widely from 8.8 to 48%.<sup>5,7,8,9</sup> Depending on the birth weights of the babies, the perinatal mortality rate had shown values from 24/1000 (>1000g) to 44.4/1000 (>1000g).<sup>7</sup> The perinatal loss recorded as 33 per cent (17 of 52 cases) in the present series appears higher. Inclusion of women with apparent fetal growth restriction (55%), and recruitment to study of pregnancies with gestations as early as 24 weeks could be the contributing factors for poorer outcome in the present study group.

Even in cases with severe preeclampsia the neonatal survival is directly related to gestational age at birth and weight<sup>10</sup>. Among the 41 live births in the present study, twelve had birth weight of less than 1000 gm. The neonatal survival of 66.6% (8 of 12) in the birth weight cohorts of less than 1000 gm was in itself a reward for the expectant management in this part of the world.



It is felt that expectant management is worth considering as long as it does not risk the maternal life with the hope of improving perinatal outcome even in a rural medical setup. However, self evaluation of the protocol in the given setting is imperative and modifications are required in order to better results.



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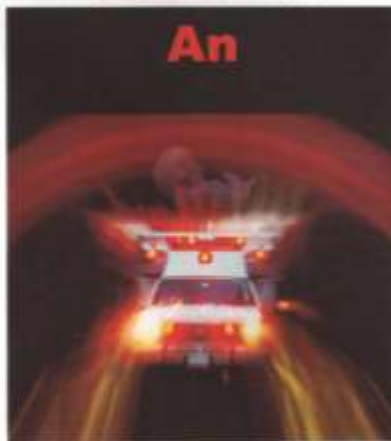
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