

**A Comparative Study on Elective Induction of Labour Vs Expectant Management in Post Edd Pregnancies**<sup>1</sup>Dr.S.V.R. Thenmozhi, <sup>2</sup>Dr.P.Vairamala, <sup>3</sup>S.Padmanaban<sup>1</sup>Senior Assistant Professor Thiruvannamalai Medical College Hospital, Thiruvannamalai.<sup>2</sup>Senior Assistant Professor of Obstetrics & Gynaecology, KMC Hospital<sup>3</sup>Research Scientist B (Non Medical) HRRRC Field unit, ICMR KMCH Chennai.**Correspondence Author:** Dr.P.Vairamala, Senior Assistant Professor, Dept. of Obstetrics & Gynaecology, KMC, Chennai.**Type of Publication:** Original Research Paper**Conflicts of Interest:** Nil**Abstract**

The last few days of pregnancy is an exciting experience for the mother and her entire family. But if she did not deliver within the calculated expected date of delivery, not only the patient, her obstetrician also became anxious and usually they don't have the patience to wait for spontaneous onset of labour. Consequently many patients are induced once they cross the given EDD, even if they remain in low risk category and there is no other indication for immediate delivery.

Whether it is good or bad for the mother and baby?

**Aims and objectives**

To study the perinatal and maternal outcome of patients who are induced at or after 280 days with those who are allowed to go for spontaneous onset of labour

**Method**

This study is a retrospective study and the data was collected from hospital records. The study period taken was between March-2017 and September – 2017. The maternal and fetal outcome of 200 patients who crossed their EDD was analyzed.

**Results**

We studied the first 200 patients who went for post EDD Pregnancy. Among them 93% of patients' belonged to

age group less than or equal to 30 years. Only 7 % of patients belonged to >30 years age. In our study among the patients who went for post EDD Pregnancy, 67% are primi and 33% are multigravida . In our study after crossing the EDD, 53% went for spontaneous onset of labour between 281 and 287 days. 47% were induced for labour .

Meconium staining of liquor was present among 18.9% of spontaneous labour group and in induced group the incidence of MSL was 40.4%

**Key words:** Elective induction, Post Expected Date of Deliveries and outcome.**Introduction**

The term delivery is defined as that occurring between 259 and 294 days of pregnancy from the last menstrual period.

The expected date of delivery is traditionally calculated from onset of last menstrual period as 280 days. Considering the new concept of 40 weeks or 280 days pregnancy period is an arbitrary one and so many factors influence it like genetic predisposition, hormonal status, age, parity, BMI and so on. If EDD is an arbitrary one, then inducing labour based on EDD alone may be an unnecessary one and may not going to give us much benefit. So, this study compares the perinatal and maternal

outcome of patients who are induced at or after 280 days with those who are allowed to go for spontaneous onset of labour.

**Method**

This study is a retrospective study and the data was collected from hospital records. The study period taken was between March-2017 and September – 2017. The maternal and fetal outcome of 200 patients who crossed their EDD were analyzed.

**Place of study**

This retrospective study was conducted in Government Kilpauk Medical College Hospital between March 2017 and September – 2017

**The Inclusion criteria**

- Those who have reliable EDD which fulfilled all the criteria or has first trimester dating scan from which EDD calculated.
- Cephalic Presentation

**Exclusion Criteria:**

- No reliable dates / No dating scan
- Non Cephalic presentations
- Presence of high risk factors which necessitate early delivery like

Hypertension, diabetes, Rh incompatibility etc. From the hospital records the data retrieved. Maternal outcome like nature of induction, mode of delivery, duration of labour and fetal outcome like birth Wt, Apgar score, neonatal complications recorded.

**Results**

We studied the first 200 patients who went for post EDD Pregnancy. Among them 93% of patients’ belonged to age group 30 years. This is in comparison to Verma et al study in which 91.10% belonged to ≤ 30 years. Only 7 % of patients belonged to >30 years age.

In our study among the patients who went for post EDD Pregnancy, 67% are primi and 33% are multigraviola

In our study after crossing the EDD, 53% went for spontaneous onset of labour between 281 and 287 days. 47% were induced for labour.

Meconium staining of liquor was present among 18.9% of spontaneous labour group and in induced group the incidence of MSL was 40.4%

Poor apgar ≤6 is observed in 15.1% in spontaneous labour group and 19.1% in induced group. Neonatal intensive care unit admission for complication or anticipated complication was 26.6% among spontaneous labour group and it was 36.1% among induced group.

**Discussion**

93% of patients who went for post EDD pregnancy were <30 years and only 7% were above 30 years age. This is in comparison to Verma at al (4) study in which 91.1% belongs to less than 30 years age. The reason could be early marriage and early onset of reproduction among Indian population.

**Table 1 :** Age distribution in Post EDD pregnancies

Age group	Total Number	Percentage
< 25	114	57%
26 - 30	72	36%
> 30	14	7%

We observed that the tendency for post EDD pregnancy is significantly high among primigravida which is 67% in comparsion to multigravida who constitutes only 33%. This is totally in contrast to the Bangladesh study by P.AKATHER et al (3) in which only 48.2% were primigravida.

**Table 2: Parity** Status and Post EDD pregnancies

Parity	Total Number	Percentage
Primi	134	67%
Multi	66	33%

The incidence of caesarean section in post EDD pregnancy is 33% in our study. This is in comparison to Verma et al study which showed 42.3%. We found that

the caesarean section rate is very high in Nimbargi V et al (5) study which showed 61.3%.

**Table 3 :**

Onset of Labour	Total Number	Percentage	Caesarean Section	
			Total Number	Percentage
Spontaneous Labour	106	53%	22	20.8%
Induced Labour	94	47%	42	44.7%

One important observation we found is the of caesarean section rate is only 20.08% in spontaneous labour group and it is 44.1% in induced group, which is more than twice in comparison to spontaneous labour group.

The Low 1 minute Apgar Score (<6) is 17% in post EDD pregnancies. The newborn requiring NICU admission for complication or anticipated complication was 29%.

The Low Apgar rate is in comparison to Nimbargi V et al study in which the low Apgar is 12.5%

We observed that low Apgar (<6) is present in 15.1% among spontaneous labour group and it was 19.1% among induced labour group. However the NICU admission is relatively high and it was 26.6% among spontaneous labour group and 36.1% among induced group. This may be because of our hospital NICU admission policy.

**Table 4 :**

Onset of Labour	Apgar ≤6	
	Total Number	Percentage
Spontaneous Labour	8	15.1%
Induced Labour	9	19.1%

We did not observe any still birth among the study population. However in Cotzias et al study (6), the still birth was 1 in 926 at 40 weeks and 1 in 826 at 41 weeks. The reason for the absence of still birth in our study population could be, small sample size and better intrapartum monitoring.

**Conclusion**

Our study concluded that between 281 and 287 days of pregnancy in the absence of any indication for early delivery, it is ideal to wait for spontaneous onset of labour. This increases successful vaginal delivery and better neonatal outcome in comparison to induced labour group.

**Acknowledgements**

Authors would like to thank Dr Vani, Professor, Government Kilpauk Medical College, Chennai, Dr V.Dharani, M.S. OG., Post Graduate Student, Government Kilpauk Medical College and Mr K.Yogananth, Deputy Block Development Officer, Tiruvannamalai, Tamil Nadu for their support in bringing out this study successfully.

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