



TO ASSESS PERINATAL OUTCOME IN PREGNANCY BEYOND EXPECTED DATE OF DELIVERY UPTO 42 WEEKS.

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Type of Publication: Observational Study

Conflicts of Interest: Nil

Abstract:

Background: Study has been carried out of 100 patients randomly selected with pregnancy beyond the EDD up to 42 weeks irrespective of any Gravidae. Primi or multi admitted in labor room of department of Obstetrics & Gynecology at Index Medical College Hospital & Research Centre, Indore.

Result: The above table shows the comparison of perinatal outcome in postdatism pregnancy. In the 40-41 weeks group, there were 48 (94.0) live births, 02 (4.0%) had still birth. In the 41-42 weeks group, there were 47 (96%) live births, 02 (4.0%) IUD and 01 (2.0%) early neonatal deaths.

The above table shows the distribution according to perinatal morbidity in postdatism pregnancies. In the 40-41 weeks group, there were 02 (4.0%) neonates with MAS and 02 (4.0%) had IUGR. In the 41-42 weeks group, there were 4 (8.0%) neonates with MAS, 2 (4.0%) each had HIE (BA) and IUGR.

Conclusion: NICU admission one of the risk factors attributed to prolonged pregnancy. Reduction in perinatal mortality is seen when caesarean section is done between 41 weeks and 42 weeks. In this complex clinical condition we should identify the fetus at risk and to institute an appropriate management following adequate counseling of patient. The study shown incidence of MSL increases by 14% in 40-41weeks and 32% in 41-42weeks. There is also concomitant increases in birth asphyxia and requiring ventilation. Perinatal Mortality associated with Fetal Distress, Meconium Stained Liquor, MAS & Birth Asphyxia.

Keywords: e.g. Fetal Distress, Meconium Stained Liquor, Meconium Aspiration Syndrome, Birth Asphyxia, HIE.

Introduction

Term pregnancy was defined as a pregnancy with gestational age from 3 weeks before till 2 weeks after the estimated date of delivery and post-term pregnancy as a pregnancy with a gestational age of 42 completed weeks or more.^[1] The reported frequency of post term pregnancy is approximately 7%.^[2]

Complications to both mother and fetus are seen in postdated pregnancies. It has been reported that in a pregnancy which has crossed the expected date of delivery; there is an increased risk of oligohydramnios, meconium stained amniotic fluid, macrosomia, fetal postmaturity syndrome, and cesarean delivery, all of which jeopardize the

baby as well as the mother. Prolonged pregnancy has always been regarded as a high-risk condition because perinatal morbidity and mortality is known to rise.^[3]

Material & Method

Study has been carried out of 100 patients randomly selected with pregnancy beyond the EDD up to 42 weeks irrespective of any Gravidae. Primi or multi admitted in labor room of department of Obstetrics & Gynecology at Index Medical College Hospital & Research Centre, Indore, Madhya Pradesh from July 2018 to Dec 2018.

Total 100 patients were selected according to the clinical examination of the patient after per abdominal examination and per vaginal examination. To all patient history of good perception of fetal movements was asked and correlated with the history and well being of the fetus.

In this study 2 groups taken:

- Group 1 contains 50 patients of 40-41 weeks gestation age,
- Group 2 contain 41-42 weeks gestation age.

Inclusion Criteria:

- Low risk primi or multi whose LMP definitely known.
- Menstrual cycle regular
- Who not taking any contraceptive 6 months prior to conception.
- 1st trimester USG or early 2nd trimester USG.
- EDD crossed beyond 1 week.

- EDD crossed of upto 2 weeks.
- The presentation must be vertex.
- Single ton intrauterine pregnancy.
- EDD was calculated as per Naegles formula.

Exclusion Criteria:

- Pregnant woman who is chronic hypertensive.
- Preeclampsia
- Preexisting diabetes
- Multiple gestation
- Non-vertex presentation
- No ANC visit
- Fetal anomaly
- Irregular menstrual cycle
- APH

Results

Table 1: Perinatal Outcome in Postdated Pregnancy

	40-41 weeks		41-42 weeks	
	No.	%	No.	%
Live birth	48	94	47	94
Still birth	02	04	00	00
IUD	00	00	02	04
Early neonatal death	00	00	01	02
Total	50	100.0	50	100.0

Pearson Chi-Square = 3.587, DF = 2, P-Value = 0.3901, Non Significant

The above table shows the comparison of perinatal outcome in postdatism pregnancy. In the 40-41 weeks group, there were 48 (94.0) live births, 02 (4.0%) had still birth. In the 41-42 weeks group, there were 47 (96%) live births, 02 (4.0%) IUD and 01 (2.0%) early neonatal deaths.

Table 2: Perinatal Morbidity in Post Datism Pregnancy

	40-41 weeks		41-42 weeks	
	No.	%	No.	%
None	46	92.0	42	84.0
MAS	02	4.0	4	8.0
HIE (BA)	00	0.0	2	4.0
IUGR	02	4.0	2	4.0

Pearson Chi-Square = 3.694, DF = 3, P-Value = 0.580, Not Significant

The above table shows the distribution according to perinatal morbidity in postdatism pregnancies. In the 40-41 weeks group, there were 02 (4.0%) neonates with MAS and 02 (4.0%) had IUGR. In the 41-42 weeks group, there were 4 (8.0%) neonates with MAS, 2 (4.0%) each had HIE (BA) and IUGR.

There were more perinatal morbidities in the 41-42 weeks group, but no statistically significant association could be established between the perinatal outcome and groups ($P > 0.05$). There was no causal relationship.

Discussion

The perinatal mortality in group I was 2% as compared to 4% in group II in the present study. One Still Birth case found in group I and one IUD & one early neonatal death found in group II. Most common cause of perinatal mortality in our study is MAS and Birth asphyxia. MAS associated with respiratory distress and pulmonary infection perinatal mortality decrease in early intervention and termination of pregnancy after 40 weeks.

In our study, overall cesarean rate was 44%. In Singhal et al^[4] rate of LSCS was 16.7% and in the study by Mahapatro^[5] it was found to be 28.9%. Out of 44 pregnancies the rate of LSCS beyond 41 weeks was found to be 24 (54.5%) which was (21.1%) by Kaplan et al.'s study.^[6] In our study, it is observed that Meconium stained liquor with fetal distress is the most common indication for LSCS 15 (34.1%) like Mahapatro's study (65.5%).^[5]

Cochrane (2008)^[7] review demonstrated lower perinatal mortality rate in induction group. In our study the perinatal morbidity in group I in the form of MAS, Birth asphyxia IUGR were 4%, 0%, 2% respectively. The corresponding figure in group II were 8%, 4%, 4% incidence of MAS double in group 2. Incidence of BA, IUGR also increase in group 2.

Conclusion

NICU admission one of the risk factors attributed to prolonged pregnancy. Reduction in perinatal mortality is seen when caesarean section is done between 41 weeks and 42 weeks. In this complex clinical condition we should identify the fetus at risk and to institute an appropriate management following adequate counseling of patient. The study shown incidence of MSL increases by 14% in 40-41 weeks and 32% in 41-42 weeks. There is also concomitant increases in birth asphyxia and requiring ventilation. Perinatal Mortality associated with Fetal Distress, Meconium Stained Liquor, MAS & Birth Asphyxia.

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