

## To Assess the Maternal Outcome in Pregnancy Beyond Expected Date of Delivery Up To 42 Weeks

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### Abstract

### Original Research Article

**Background: Result:** The above table shows the distribution of women according to AFI in postdatism pregnancies. In the 40-41 weeks group, only 6 (12.0%) women had AFI < 5 cm, while 44 (88.0%) women had AFI ≥ 5 cm, while in the 41-42 weeks group, there were 15 (30.0%) women with AFI < 5 cm. There was a significantly higher proportion of AFI < 5 cm in 41-42 weeks group in comparison to the 40-41 weeks group (P<0.05). The above table shows distribution of women according to outcome of labor in both the groups. In the 40-41 weeks group, 22 (44.0%) women had undergone normal vaginal delivery, while 28 (56.0%) women had undergone LSCS. In the 41-42 weeks group, 16 (32.0%) women had undergone normal vaginal delivery, while 34 (68.0%) women had undergone LSCS. There were comparable distribution of women who underwent normal vaginal delivery and LSCS in both the groups (P>0.05). **Conclusion:** Current research demonstrated that is increased in the risk for both mother and babies. Absolute risk of adverse event associated with gestational age. 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.

**Keywords:** Maternal, Pregnancy, Delivery & Outcome.

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## INTRODUCTION

The post term pregnancy is defined as pregnancy that has prolonged to or beyond 42 weeks of gestation [1]. The timely onset of labor & birth is a significant determinant of perinatal outcome. The incidence of post term pregnancy varied from 3-12% [1,2]. Post term pregnancies are associated with both fetal and maternal complications. Perinatal morbidity has also been noted to be higher in post-term pregnancies including oligohydramnios, meconium, and macrosomia and meconium aspiration syndrome, fetal distress in labor, fetal birth injury, and rates of cesarean delivery. While; it is well established that these risks are increased in post-term pregnancy, what is less well elucidated is whether these risks increase prior to 42 weeks gestation.

The most common cause of extended pregnancy is inaccurate dating [3, 4]. The risk factors are primiparity, maternal genetic factors, prior postdatism, obesity & male gender of the fetus [5, 6]. Criteria for diagnosing postdates are correlation of menstrual history, clinical findings and USG.

Ultrasonographic dating in early pregnancy can improve reliability of EDD.

In postdate pregnancy there are chances of fetal hypoxia, asphyxia, intracranial damage, meconium aspiration syndrome, macrosomia, atelectasis, hypoglycemia and stillbirths. These perinatal risks increase with increase in the gestational age beyond 40 weeks [7].

The maternal risks include an increase in labor dystocia, an increase in severe perineal injury related to macrosomia and operative vaginal delivery and an increase in the rate of cesarean delivery and postpartum hemorrhage [8].

## MATERIALS & METHODS

Study has been carried out of 100 patients randomly selected with pregnancy beyond the EDD upto 42 weeks irrespective of any gravidae. Primi or multi admitted in labor room of department of Obstetrics & Gynecology at Sri Aurobindo Medical

College and Post Graduate Institute, Indore, Madhya Pradesh from Sep 2016 to Dec 2017.

### 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.

### Prerequisites

- Proper counseling of a patient be done.
- Collaboration with anesthetist and neonatologist

### 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-01: AFI in postdated up to 42 weeks pregnancy**

	40-41 weeks		41-42 weeks	
	No.	%	No.	%
< 5 cm	6	12.0	15	30.0
≥ 5 cm	44	88.0	35	70.0
Total	50	100.0	50	100.0

Pearson Chi-Square = 4.882, DF = 1, P-Value = 0.027, Significant

The above table shows the distribution of women according to AFI in postdatism pregnancies. In the 40-41 weeks group, only 6 (12.0%) women had AFI < 5 cm, while 44 (88.0%) women had AFI ≥ 5 cm,

while in the 41-42 weeks group, there were 15 (30.0%) women with AFI < 5 cm.

There was a significantly higher proportion of AFI < 5 cm in 41-42 weeks group in comparison to the 40-41 weeks group (P<0.05).

**Table-02: Gestational week wise outcome of labor**

	40-41 weeks (n=50)		41-42 weeks (n=50)	
	No.	%	No.	%
Vaginal delivery	22	44.0	16	32.0
LSCS	28	56.0	34	68.0
Total	50	100.0	50	100.0

Pearson Chi-Square = 1.528, DF = 1, P-Value = 0.216, Not significant

The above table shows distribution of women according to outcome of labor in both the groups.

In the 40-41 weeks group, 22 (44.0%) women had undergone normal vaginal delivery, while 28 (56.0%) women had undergone LSCS.

In the 41-42 weeks group, 16 (32.0%) women had undergone normal vaginal delivery, while 34 (68.0%) women had undergone LSCS.

There were comparable distribution of women who underwent normal vaginal delivery and LSCS in both the groups (P>0.05).

## DISCUSSION

In our study, 12% and 30% cases found with <5 cm AFI in group I and group II respectively in our study chi square -4.882 & p value 0.027, which was statistically significant, after 41 weeks oligohydramnios is more MSL chanced is increased, so perinatal morbidity & LSCS rate increase after 41 weeks.

Sultana *et al.* [9] show 16% cases of <5 cm AFI in post datism pregnancy. Both study show increased risk of oligohydramnios in group II than group I.

Gestational weeks wise outcome of labor: 56% of women in group I and 68% women in group II underwent to emergency LSCS. Only 44% and 32%

respectively in group I and II goes vaginal delivered, incidence of LSCS increase in group 2. The rate of Medical & Surgical intervention increase with increase in the gestational age because of increased frequency of fetal distress, failed induction & MSL.

Sultana *et al.* [9] study shows 72% of women underwent abdominal delivery which is similar to my study, showing increase rate of LSCS in post datism pregnancy. Singh *et al.*[10] found 40.57% women in 40-41 weeks underwent LSCS & 50% women goes LSCS in 41-42, which show LSCS rate increase when gestational age increase, which was similar to my study.

Paras V. Dobariya [11] *et al.* Majority of the patients belong to age group 20-30 years (69.05%) followed by <20 years (23.81%). According to gestational age by dates, majority of cases were between 41-42 weeks accounting 52.38%. Only 2.38% were more than 42 weeks. When gestational age was calculated by first ultrasound, majority of cases were between 41-42 weeks and only 1.19 % was >42 weeks. Out of 84 patient 04 (4.76%) were diagnosed IUFD with loss of fetal movements. Majority of patients (85.72%) were having normal DFMC.

## CONCLUSION

Current research demonstrated that is increased in the risk for both mother and babies. Absolute risk of adverse event associated with gestational age. 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.

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