



MATERNAL AND FETAL OUTCOME IN POST TERM PREGNANCY – A RETROSPECTIVE STUDY

Dr. Rani Dipa

Senior Resident In Department Of Obstetrics And Gynaecology, Patna Medical College And Hospital (PMCH), Patna.

ABSTRACT

BACKGROUND – The term delivery is defined as that occurring between 259 and 294 days of pregnancy from the last menstrual period. If the pregnancy exceeds this period it is called post term pregnancy. In my hospital most of the patients are unbooked or even booked patients do not follow up. So, this study was done to know the incidence of maternal and fetal outcome in case of post term pregnancy in our population.

METHODS :- This study was a retrospective observational study for 1 year to analyze the maternal and fetal outcome of post term pregnancies. Data was collected from hospital record and analyzed.

RESULTS:- Out of total deliveries 1.49% were beyond the 42 weeks, 57.69% patients delivered vaginally whereas 42.31% patients needed cesarean section. 6.41% neonates developed meconium aspiration syndrome and 15.38% of neonates needed NICU admission for different indications.

CONCLUSIONS:- This study concluded that prolonged pregnancy is associated with adverse outcomes like fetal distress, meconium aspiration syndrome and more neonatal ICU admissions. The outcome of post dated pregnancy can be improved by proper counseling for follow up during pregnancy and proper monitoring and appropriate management during labor.

KEYWORDS : Fetal Distress, Induction of Labor, Maternal and foetal outcome, Post term Pregnancy.

INTRODUCTION :-

In term delivery is defined as that occurring between 259 and 294 days of pregnancy from the last menstrual period (LMP). If the pregnancy exceeds this period, it is called as Post term Pregnancy (PTP). 11% of all the pregnant women remains undelivered after 42 weeks. Prolongation of pregnancy beyond 40 weeks occurs more frequently in about 1 out of 10 pregnancies. Dating (USG) ultrasonography in early pregnancy improves the reliability of expected date of delivery (EDD). The incidence of post term pregnancy depends on whether the calculation is based on the history or early pregnancy ultrasonography is also used find the EDD. A series of changes occur in the amniotic fluid, placenta and fetus which are associated with prolonged gestation. When pregnancy crossed the EDD, there is an increased risk of intrapartum fetal distress mostly due to oligo hydramnios, meconium stained liquor, macrosomia, fetal post maturity syndrome and cesarean delivery. Most serious complications of post term pregnancy is meconium aspiration syndrome which has mortality upto 60% but now it is reduced due to nasopharyngeal aspiration of new born before 1st breath. Because of these complications associated with post term pregnancies is considered as high risk pregnancies. Despite these complications delivery of all women who have reached or beyond EDD is not recommended because of high incidence of failed induction and cesarean deliveries (in case of unfavorable cervix). The study was done to find out the incidence of post term pregnancies and to analyze the maternal and fetal outcome.

METHODS :-

It was a retrospective observational study for a period of 1 year from June 2019 to June 2020 at Patna Medical College and Hospital. The patients with regular menstrual cycle with known last menstrual period, admitted to the hospital beyond 42 weeks of gestation and delivered at our hospital were included in the study. Patients with multiple pregnancies, HDP, Diabetic Mellitus and other medical disorders were excluded from study. Data was collected from hospital records.

RESULTS :-

The total number of deliveries over one period were recorded out of which 78 patients were beyond 42 weeks of gestation so the incidence of post term pregnancy was 1.49% at our centre. 91.1% patients were in the age group of 20-30 years only 6.7% patients were in the age group >30 yrs. 55.17% patients were primigravidae.

Table 1 :- Demographic Distribution

Parameter	Total Number(n)	Percentage	
Age Group	20-30	71	91%
	30 Yrs	7	8.97%
Parity	Primi	43	55.1%
	Multi	35	44.87%
Booking Status	Unbooked	47	60.25%
	Booked	31	39.74%

The number of unbooked cases are more in the study (60.25%). At our centre we have done induction at 40+ weeks because of loss of follow up of patients and perinatal complications associated with post term pregnancy.

Table-2 Mode of Delivery

Mode of Delivery	Number of Patients(n)	Percentage
Vaginal delivery	42	53.84%
Operative vaginal	3	3.84%
Cesarean section	33	42.3%

Table 3 :- Methods of Induction of labour.

Method	Total Number(n)	Percentage
Prostaglandin gel	17	70.83%
Intra cervical foleys	2	8.33%
Catheter		
Oxytocin	5	20.83%

Table 4:- Outcome of Patients undergone induction of labour:-

Outcome	Total Number(n)	Percentage %
Vaginal Delivery	15	62.5%
Cesarean Delivery	9	37.5%

out of total 78 patients 24 patients (30.76%) needed induction of labor out of which 70.83% were induced by dinoprostone gel, 8.33% with intracervical foleys catheter (inflated with 30cc distilled water) and 20.83% with oxytocin, according to Bishop Score.

Out of total 78 post term patients 45 (57.6%) patients delivered vaginally and 33 (42.30%) patients needed c.section. Out of total induced patients (24) 37.5% patients needed c.section.

Birth weight of 23.07% neonates were neonates were >3 Kg. Only 7 (8.97%) neonates were of birth weight >4Kg. 6.41% neonatal developed meconium aspiration syndrome 15.38% of neonates needed NICU admission.

Table 5:- Perinatal Outcome

Outcome Variable	Total Number of Patients	Percentage
Apgar Score <6	7	8.97%

IUGR	7	8.98%
Birth Weight 2-2.5 Kg	50	64.10%
Birth Weight 3.1-4 Kg	18	23.07%
Birth Weight >4 Kg	7	3.84%
Meconium		

DISCUSSION :-

In our study there were 1.49% post term deliveries which are similar to study done by Nimbargi V, who reported the incidence of 1.3% and zeitin et al who reported the incidence ranging between 0.4 to 7.1% . The incidence of post term pregnancy in present study is lower than the study conducted by Ingemarsson et al , Ahanya et al and by Marahatte R et al in Nepal , who reported the incidence of post dated pregnancy 8.3%, 7.6% and 4.6% respectively. The lower incidence of post term pregnancy in our study may be because of induction of labour at 40+ weeks in our center. In present study, most of the patients were in the age group <30 yrs {91.10%} which was similar to the study conducted by Eik-Nes SH in which 80.6% patient were in the age group <34 yrs.

In this study, the rate of cesarean section was 42.30% which was less than in the study conducted by Nimbargi V et al in which cesarean rate was 61.30% . In this study , meconium aspiration syndrome was found in 6.41% neonates which was similar to the study conducted by the Nimbargi v et al in which it was affecting 7.5% neonates . 15.38% neonates needed intensive care for different indications in present study which was similar {12.50%} to study conducted by Nimbargi V.

In present study, 3.84% infants were having >4 Kg birth weight which is less than the study conducted by Beischer NA et al which showed 18.20% infant of birth weight >4Kg . There were 2.56% still birth in this study which was similar to the study conducted by Inge marsson et al in which still birth was 2.26%.

CONCLUSION :-

This study concluded that post term pregnancy is associated with adverse outcomes like fetal distress, meconium aspiration syndrome and NICU admissions. There is increased incidence of C- section in post dated pregnancies. The adverse outcome can be reduced by counseling for antenatal checkup and follow up during pregnancy and proper monitoring during labour.

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