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Original Research Article

A Study of Fetal Apgar score in Pregnancy beyond 40 Weeks

Dr. Ananth Pai*

Associate Professor, Department of Paediatrics, Kanachur Institute of Medical Sciences, Mangalore-Thokkottu-Konaje University Rd, Kotekar Village, Deralakatte, Karnataka 575018, India

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*Corresponding author: Dr. Ananth Pai

Abstract

Postdated pregnancy or in other words the pregnancy which has crossed the EDD is one of the many reasons that causes a great amount of stress to the parents and also the pediatricians. Prolongation of pregnancies complicates pregnancies and carries increased risk to mother and fetus. Emerging evidence demonstrates that the incidence of complications increases after 40 weeks of gestation. The present study conducted to find out the fetal outcome of such prolonged pregnancy. *Methods:* A prospective study conducted in Department of Pediatrics Kanachur Institute of Medical Sciences, Deralakatte, Mangalore, Karnataka. Data collected from pregnant women completed 40 week of gestational age admitted in hospital were collected. Aim of study is to know the fetal complications. *Result:* In our study out of 30 pregnant women were selected. *Conclusion:* Post term pregnancies require early detection, effective and proper planning management.

Keywords: Postdated pregancy, fetal complications.

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Introduction

Post dated pregnancy is defined as one which has crossed expected date of delivery. Pregnancy more than 42 weeks or 294 days is called post term pregnancy.

Prolongation of pregnancy complicates upto 10% of all pregnancies and carries increased risk to mother and fetus [1, 2]. Post term perinatal mortality is greater than that of term pregnancy in almost all studies [3]. Post term is also associated with increased maternal morbidity [4]. Ante -partum stillbirth at and beyond term (37-43 weeks gestation) is a major public health problem accounting for a greater contribution to perinatal mortality than either deaths from complications of prematurity or the sudden infant death syndrome [5].

Exact etiology is not known but some risk factors are associated with postterm pregnancy like parity, maternal age, past history of postterm pregnancy, genetics and obesity [6, 7].

Common risk factors include primiparity [8-10], previous postterm pregnancy [11], male fetus [12], obesity [13], hormonal factors and genetic predisposition [14].

Post-term pregnancy associated with an increased risk of postnatal mortality and morbidity including meconium aspiratiom syndrom, oligohydramnios, macrosomia, fetalbirth injuries, septisemia, rate of non reassuring fetal heart rate, fetal distress in labour and maternal complication incresed c.s rate, cephalopelvic disproportion, cervical tear, dystocia, post partamhemorrhage [15].

In the present study, fetal outcome was studied in pregnancy beyond 40 weeks in consideration of spontaneous and induced labor

METHODS

A prospective study conducted in Department of Pediatrics Kanachur Institute of Medical Sciences, Deralakatte, Mangalore, Karnataka. Data collected from pregnant women completed 40 week of gestational age admitted in hospital were collectedrs. Aim of study is to know the APGAR score.

Patient Selection

By random selection fulfilling following criteria

- Those who crossed expected date of delivery
- Vertex presentation
- Surity of dates
- Singleton pregnancy

Total 30 patients were selected according to the clinical examination of the patient.

RESULT

Table-1: Distribution of cases according to Parity

Gravida	No. of patients
Primi	21
Multi	09

Table-2: Distribution of cases according to Gestational Age

Gestational age	No. of patients
>40	27
>41	3

Table-3: Distribution of cases according to Age

Age in years	No of patients
<20	08
21-30	19
>31	03

Table-4: Distribution of cases according to APGAR SCORE at 5 min

APGAR SCORE at 5 min	No of patients
<7	26(18.5)
>7	114(81.5)

DISCUSSION

The present study was conducted to find the maternal and perinatal morbidity associated with post dated pregnancy, total of 140 cases were post dated in 3 year period which are selected based on inclusion criteria.

Incidence of post dated pregnancy were more among primiparity, Olesen AW [10] in his study found that majority of postdated patients belong to primiparity.

Majority of patients were between 40-41 week in our study which correlates with Nikita Patel [16].

Majority of patients were more in age group 21-30 years, Beischer [17], Bancroft [18] in his study found that majority of postdated patients belonged to the age group 21-30 years.

A comparative study done by C.J.M Sneijers *et al.*, shows 88.7% rate of induction in postterm pregnancy. Present study shows that percentage for type of induction for Cerviprime and misoprostol (25μg) was 85.7% and 14.3%, a comparative study done by Ss Ramesh *et al.*, shows 74.4% and 9.21% for Cerviprime, and misoprostol (25μg) respectively.

In the present study Mode of delivery are 60 (42.85%) is normal vaginal delivery, 6(4.%) are instrumental delivery, caesarean section in 74(52.85%)

which correlates with study done by Farhat Naz/Amina Javid [19] shows that rate of LSCS, FTVD (spontaneous or induced) and Instrumentation was 70%, 18.33% and 11.67% respectively. Study done by

Kana R Odedara [20] shows that rate of LSCS, FTVD (spontaneous or induced) was 62% and 38% respectively.

Most common indications for LSCS are fetal distress 22(30%), MSL 15(20%), failed induction 14(19%), severe oligohydromnios 10(13.5%), CPD 7(9.5%), others are 6(8%), which correlates with Martin *et al.*, [21] 31.6% and other studies James Alexander *et al.*, [22] also showed fetal distress is most common indication for LSCS.

Majority of babies 114(81.5%) were having Apgar score >7. Singal P *et al.*, [23], James Alexander *et al.*, [22] and Heimstad R *et al.*, 24 found similar results as present study.

CONCLUSION

Post term pregnancies require early detection, effective and proper planning management. With Regular antenatal check-up, incidence of postdate pregnancy can be decreased and it is important because of definite risk to fetus as pregnancy continuing beyond 40 weeks of gestation is associated with increased perinatal morbidity and mortality.

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