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Maternal and Fetal Outcome in Postdated Pregnancies

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Abstract
Prolonged pregnancy is one that extends beyond expected date of delivery >42 weeks.
It causes lot of maternal and fetal complications because of placental ischemia, macrosomia, uteroplacental insufficiency, that in turn increase fetal morbidity.
Methodology and Results: *It is a retrospective study done over a period of one year in skims. Prevelance of postdated pregnancies in our study was 20%*
It was more in age group of 30-40 years, more in multiparas. Maternal morbidity like PPH, shoulder dystocia, cervical tear, cesarean delivery was more in postdated pregnancies. Fetal complications like meconium aspiration syndrome, intrauterine fetal death, NICU admission was more in postdated pregnancies.
Conclusion: *Proper supervision of pregnancies should be done so that they are not allowed to run past EDD. Furthermore postdated pregnancies should be delivered in hospital equipped with electronic fetal monitoring, so that timely detection of any fetal or maternal complication can be done and timely action can be taken.*

Introduction

Prolonged pregnancy is one that had extended to or beyond 42 weeks of gestation (ACOG 2004)[(1)] Fernandos Arias defined prolonged pregnancies as those extending beyond expected date of delivery (EDD)[(2)]

Postdated pregnancies are associated with placental, fetal and maternal changes. In term of placental changes it is associated with uteroplacental ischemia as seen by histopathological changes of placenta at the time of delivery, this is involved in genesis of postmaturity syndrome[(3)], because of this uteroplacental ischemia, oxygen and nutrient supply to fetus is curtailed leading to intrapartal fetal distress.

In postdated pregnancies fetal growth continues resulting in macrosomia, such macrosomic babies are more predisposed to hypoglycemia and polycythemia[(4)]

Maternal risks associated with postdated pregnancies involve non progression of labour, shoulder dystocia, traumatic vaginal delivery like third and four degree perineal tear, cervical tear, increased chances of cesarean section[(5,6,7,8)], more chances of atonic PPH, endometrisis, postpartal sepsis, Thromoembolic complications[(7, 9)]

Fetal risks involve more chances of intrapartal asphyxia, meconium aspiration syndrome, Sudden intrauterine death, chances of cord compression, hypoglycemia, polycythemia, hyperbilirubinemia. For this reason postdated pregnancies should be delivered in hospitals equipped with continous electronic fetal monitoring is possible.

Methodology

This study was a retrospective study carried over a period of one year from year January 2015 to December 2016. 1000 deliveries were observed over this period, out of 1000 deliveries, 200 deliveries were postdated deliveries. Their prevelance, maternal and perinatal outcome was observed.

1. Total no. Of deliveries observed over a period of one year= 1000

Total no. of postdated pregnancies=200

Prevelance = 20%

2. Distribution of postdated pregnancies according to age

AGE GROUP	no. of patients	percentage
20-30 years	80	40%
30-40 years	120	60%

Thus 60% of patients were in age group of 30-40 years

3.Distribution of patients with regards to parity

Parity	no. of patients	percentage
Primiparas	60	30%
Multiparas	140	70%

Thus majority of postdated patients were multiparas

4.Distribution of patients with regards to mode of delivery

Type of delivery	no. of patients	percentage
Normal vaginal delivery	15	7.5%
Instrumental delivery	75	37.5%
Casearen delivery	110	55%

Maximum chances of cesarean delivery in our study were because of Non. Progressive labour, shoulder dystocia, meconium aspiration syndrome, intrapartal fetal distress.

5.Morbidity in relation to postdated pregnancies

Type of morbidity	no. of patients	percentage
Labour dystocia	40	20%
Shoulder dystocia	70	35%
Postpartum Hemmorage	50	25%
Endometrisis	25	12.5%
Sepsis	15	7.5%

Fetal complications in relation to postdated pregnancies

Fetal complication	no. of patients	percentage
Intrauterine death	25	12.5%
Meconium aspiration syndrome	50	25%
Macrosomia	45	22.5%
NICU admission	80	40%

Discussion

Our study was a retrospective study including 1000 deliveries Out of which 200 deliveries were postdated, thus prevelance of Postdated pregnancies in our study was 20%, this is similar to study done by shivani singh et al[10]

In respect to age distribution in our study postdated pregnancies we're more in age group of 30-40 years(60%) and were more in multiparas (70%) than in primiparas.

With regards to mode of delivery normal deliveries in our study Normal deliveries in our study were 7.5%, instrumental deliveries in our study were 37.5%, and casearen deliveries were 55%. More Chances of cesarean deliveries in postdated pregnancies was because of fetal acidosis, fetal macrosomia, shoulder dystocia. A study from scottland published in 2010 demonstrate that chances of stillbirth increases as pregnancy advances after 39 weeks[11]. Similar Study was published by Mannico F et al[12]. In our study stillbirth was seen in 12.5% and meconium aspiration syndrome in 25% and macrosomia in 22.5% and NICU admission in 40% patients. In our study major fetal morbidity was meconium aspiration syndrome (25%). Similarly In study by Kristka et al[13] meconium aspiration syndrome was leadingcause of perinatal mortality.

Conclusion

Postdated pregnancies should be properly supervised and mointored especially in hospitals equipped with electronic fetal monitoring. As the chances of maternal and fetal complications tend to be more in postdated pregnancies, all such pregnancies should be supervised during labour and whenever any indication of fetal distress appears cesarean section should be done.

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