

MATERNAL & PARINATAL OUTCOME IN ELDERLY PRIMI GRAVIDA & ITS RECENT EFFECTIVE MANAGEMENT

Obstetrics & Gynaecology

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Abstract:

Objective: This study to evaluate maternal and perinatal outcome in elderly primigravida.

Method: Prospective hospital based study done of 100 patients with elderly primigravida enrolled in M. Y. Hospital & Kalyanmal Nursing Home, Indore from January 2015 to December 2015.

Results: This study show 38% women postponed their pregnancy due to education. Gestational hypertension develops in 28% elderly primigravida. Gestational diabetes mellitus in 6%. Anemia in 43%. Antepartum haemorrhage in 3%. Cesarean section rate 40%. Preterm vaginal delivery 17%. Induction of labour in 11% and normal delivery only in 29% and congenital anomaly 3%.

Conclusion: Elderly women are at a high risk of several complications including instrumental deliveries, mal-presentations, mal-positions, prolonged labor, increased caesarean section rate, induction of labor, pregnancy induced hypertension, diabetes mellitus, ante and post partum haemorrhage. Fetal pregnancy outcomes such as, Oligohydramnios, Breach and Transverse lie were found significantly more in elderly primigravida. Likewise vaginal deliveries were significantly less in elderly primi gravida. Also, APGAR score and Mean birth weight was significantly lower in newborns of elderly primi gravida.

Keywords: Maternal & Parinatal Outcome, Elderly Primi Gravida, Recent Effective Management

Introduction

Pregnancy is the only time in a women's life when she can help God work a miracle. Mothers and children are the vulnerable group in any population. In India women of child bearing age constitute 19%. The health of the mother lays a strong foundation to the health of the nation in general.¹ Pregnancy and child birth are normal physiological processes and outcomes of most pregnancies are

good. Data suggests that around 40% of all women develop some complication. One such risk factor is an elderly pregnancy that leads to many complications during pregnancy, labor and also for the baby.²

Elderly Primi Gravida Women who become pregnant first time after the age of 35 years.

Now a days, women because of their career and education and other problems delay

pregnancy. Elderly women are at a high risk of several complications including instrumental deliveries, mal-presentations, mal-positions, prolonged labor, increased caesarean section rate, induction of labor, pregnancy induced hypertension, diabetes mellitus, antepartum and postpartum haemorrhage.³

In recent times, women have changed their life style such as in the pursuit of higher education and entry into work forces and career advancement outside the home. Consequently, this has led to postponement of child bearing, resulting in an increasing maternal age and increase in the rate of divorce followed by remarriage etc. contributes to this upward trend.⁴

Material and Methods

This is a hospital based prospective observational study. This study was conducted in Department of Obstetrics and Gynaecology, M.G.M. Medical College and M.Y. Hospital and Kalyanmal Nursing Home of Hospitals, Indore during a period from January 2015 to December 2015. This study was approved by subject committee and permission obtained from the hospital authority where this study was conducted.

All women having age >35 years were enrolled in this study after their admission in the hospital.

A total of 100 cases were enrolled in the study.

The labour ward register and case records were used of all elderly primigravida women delivered at MYH & KNH.

Exclusion Criteria

- Married women who have age <35 yr.
- Married women who have underwent permanent sterilization.

Observations

Table No. 1: Distribution of cases according to causes for postponing child bearing

Causes of postponed	No. of Patients	Percentage
Occupation	22	22%
Education	38	38%
Infertility	4	4%
Social	20	20%
Others	16	16%

Table No. 2: Distribution of cases according to Educational Status

Socioeconomic status	No. of Patients	Percentage
Illiterate	22	22%
High School	34	34%
Higher Secondary	28	28%
Graduate / Postgraduate	16	16%
Total	100	100%

Table No. 3: Maternal complications in elderly primi gravid

Antenatal Complications	No. of cases	Percentage
Gestational Hypertension	28	28%
GDM	6	6%
Anaemia	43	43%
Antipartum Haemorrhage	3	3%
H/o of Abortion	7	7%
Other	13	13%

Table No. 4: Mode of delivery in elderly primi gravida

Diagnosis	No. of Patients	Percentage
Normal Labour	29	29%
LSCS	40	40%
Preterm Labour Oligo + IUGR	17	17%
Induced Labour	11	11%
Assisted Breech Delivery	1	1%
TVSD	2	2%
Total	100	100%

Table No. 5: Various causes of Perinatal outcome

Perinatal Outcome	No. of cases	Percentage
Congenital Anomaly	3	3%
IUGR	6	6%
Still Birth	2	2%
Other	89	89%
Total	100	100

Discussion

The present study was a hospital based prospective study, conducted over the period of one year. The study included 100 women >35 years of age. All the cases were evaluated till delivery for maternal and fetal complications and outcome. A definite increase in the number of women bearing children in their 30's and 40's is expected to occur both in developing and developed countries. Women's career priorities, tertiary education, availability of fertility control, late and second marriages, changes in socio-cultural patterns and mores are some of the common factors affecting postponement of childbearing. Postponement of marriage in the Indian women may be due to a lack of opportunity to meet the right partners. Very often this is due to high literacy rates amongst these women. Teachers, civil servants and other female professionals serving in the rural areas lack the opportunity of meeting men of equal social standing. Physical unattractiveness especially obesity, is another reason for postponement. It is not uncommon for them to be taken as second or third wives of elderly men and pensioners.

Age Group

92% belonged to 35-40 years, 8% belonged to 41-45 age group, The mean age group was 36.8 years in this study. Marriage to conception interval in elderly primi gravida was analyzed and found that 51% the interval was <2 years, 41% interval was 3-5 years and 8% interval was >5 years of marital age.

Pregnancy in women of advanced age is considered a high risk. This concept has been diffused into the health delivery system of the country and prompt referral of these patients for consultation and care is made. Improvement of pregnancy outcome should be anticipated with the availability of amniocentesis, cytogenetics, electronic fetal

monitoring and ultrasonography. Except for the latter, the other facilities were not available at this hospital during the period of study. Clinical supervision was largely relied on in management of the cases.

Complications in Pregnancy

The elderly primigravida is more likely to encounter complications which are the result of the natural process of ageing. Complications of early pregnancy like abortions have been known to occur in this special group (3). There were 7 cases of abortions.

Pregnancy induced hypertension occurred in 28% of elderly primigravidae. This is significantly higher when compared with Sahu T *Meenakshi et al (2007)*⁶ 10% of the complication in primigravidae. One of these patients discharged herself against medical advice when she was under management for severe pregnancy induced hypertension.

Abruptio placentae occurred in 3% patients which are similar to Sahu T *Meenakshi et al (2007)*⁶. The complication arose without warning and she delivered a fresh stillborn infant after low artificial rupture of membranes and oxytocin infusion.

The incidence of preterm labour was 17%. Tocolytic agents play a limited role in management of established preterm labour. The availability of an excellent neonatal care unit may compromise the need for prolongation of pregnancy in these cases.

Diabetes mellitus was 6% which are higher to Rajmohan Laxmi et al. (2013).⁵ The frequency of this metabolic disorder was increased among "primiparas aged 35 and above. As the patient gets older, she may develop other gynaecological problems. Of these, uterine myoma appears to be the most common. One patient in this series had a large uterine fibroid over the lower segment and she had a classical caesarean section done at the time of labour.

A higher incidence of breech presentation has been reported in elderly primigravida.⁶ This high incidence was not related to prematurity, uterine anomaly or fetal anomaly. Though genetic counselling and amniocentesis for cytological karyotyping and biochemistry should be offered for women in the advanced group, these were not available at this hospital.

Management of Labour:

Patients delivered vaginally 29, in which instrumental delivery required 6. Caesarean section was performed on 40% of cases. Stanton demonstrated an increase in prolonged labour among older pregnant women. Friedman showed an increase in prolonged second stage with advancing age.

An elderly primigravida is anxious and often unsure of her ability to deliver safely. Some degree of uterine inertia may also play a role in causing prolonged labour. Induction and augmentation of labour with oxytocics were carried out in 32% of the cases. A high intervention rate is a consistent finding in the literature. A caesarean section rate of 17% was reported by Grimes and Gross compared to 10% in those under 35 years of age. These figures are much lower than that reported by other workers. Blum found a higher caesarean section rate (49%). In our series the caesarean section rate (40%) was four times higher than that of the hospital population. The hospital policy of performing caesarean section for all breech presentations in elderly primigravida may have contributed towards the increased rate. Postpartum haemorrhage due to uterine atony was seen in only 3% patients. Maternal.

Mortality and Morbidity

There were no maternal deaths in this series. The increased maternal morbidity was due to the increased incidence of hypertension.

Anemia was noted in 43% of cases in spite of close supervision. This was attributed to failure to take prescribed haematemics, food preference and food taboo in pregnancy. A refractory anemia most probably due to a chronic renal pathology was suspected. However, this patient was lost to follow-up after recovering from a caesarean section.

Perinatal Mortality and Morbidity

The perinatal mortality rate of 20 per 1000 births in this series was much lower than that of the hospital population (26.8 per 1000). Much higher perinatal deaths have been reported in the literature. Early booking, close supervision in the antenatal and intrapartum period, appropriately

timed obstetric intervention and the advocacy of active management of labour may have contributed to good fetal outcome. Obstetric practice presently has moved away from high cavity forceps delivery and unwarranted breech extraction. The liberal use and early resort to caesarean sections has, however, to be looked upon with caution. Advocation of abdominal delivery purely on the grounds of advanced age should be discouraged.

Conclusion

Elderly women are at a high risk of several complications including instrumental deliveries, mal-presentations, malpositions, prolonged labor, increased caesarean section rate, induction of labor, pregnancy induced hypertension, diabetes mellitus, ante and post partum haemorrhage.

It was concluded that among maternal pregnancy outcomes PPH, Induction of labour and cervical dystocia were found significantly more in elderly primi gravida. Fetal pregnancy outcomes such as, Oligohydramnios, Breech and Transverse lie were found significantly more in elderly primigravida. Likewise vaginal deliveries were significantly less in elderly primi gravida. Also, APGAR score and Mean birth weight was significantly lower in newborns of elderly primi gravida. Mean time in starting breast feeding was significantly higher in elderly primi gravida because lactational failure more in elderly primigravida.

Consistent with other studies, hypertension was the most common disorder complicating pregnancy at age 35 and above. Cases were more likely to undergo induction of labour and operative delivery. Larger studies are needed to establish the exact magnitude of these associations and to show any significant difference in antepartum obstetric problems and fetal and neonatal outcome measures.

The "mature primigravida" poses special obstetric problems. These have been highlighted in obstetric literature. There are differing views on the risks on embarking pregnancy at a later age in life. Unwarranted intervention in labour based on age alone is not acceptable. Management will largely depend on attempts at improving perinatal outcome without compromise to health and well-being of the mother. The perinatal mortality rate was low but the caesarean section rate was high in this study.

Management

Pregnancy in women after 35 years is considered high risk due to the various risks factor so when planning pregnancy and during pregnancy special care given to elderly primi gravida.

1. Preconceptional Counseling :

- Preconceptional counseling is very important in this age group and many women willingly seek it.
- This is very important for women with pre-existing medical problems in which case pregnancy can be planned after stabilizing the medical condition.

2. Prenatal Diagnosis

- Prenatal diagnosis is extremely important considering the increased chance of chromosomal defects.
- Ultrasound screening for Down's syndrome is recommended.
- Targeted anomaly scan at 18-20 weeks is a must.
- Chorion villus sampling (CVS) or amniocentesis may have to performed to rule out chromosomal anomalies.

3. Antepartum Management

- More frequent antenatal visits with antepartum fetal surveillance with serial ultrasound and Doppler.
- Opinion of a physician may be necessary, if there are associated medical complications.

4. Intrapartum Management

- Close monitoring is indicated in labor.
- Hospital delivery preferably in a tertiary center with good neonatal care facilities is a must.

- CTG monitoring is ideal.
- Judicious monitoring of labor is required.
- A lower threshold for cesarean section is preferred in these women and in many cases, elective cesarean section may be ideal.
- The newborn should be taken care of by an expert neonatologist.

5. Postpartum Management

- Elderly primi gravida need better care to avoid postpartum complications and failing lactation.
- They also need contraception advice

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