

Comparison of Placental Abruption Between Multipara and Grand Multipara

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ABSTRACT

Objective of study is to compare the frequency of placenta abruption between Grand multipara and multipara. **Study design:** Descriptive Case Series. **Place and duration of study:** Department of Gynecology & Obstetrics Allied Hospital, Faisalabad Medical University, Faisalabad. **Period of study:** 6 months from 1st Jan 2016 to 30th June 2016. **Methodology:** After taking approval from hospital ethical committee a patients admitted in emergency who fulfilled inclusion criteria were enrolled in this study. Parity was recorded, based on which patients were divided into multipara groups according to operational definition. Placenta abruption was recorded and results compared. **Results:** Total 425 patients fulfilling inclusion and exclusion criteria were enrolled in our study. Out of these 425 patients, 11 patients had placenta abruption (2.58%). Comparison between grand multipara and multipara showed that 3 (0.71%) cases of placenta abruption noted in multipara and 8 (1.88%) were in grandmultipara. P value was calculated as 0.02. **Conclusion:** It was concluded that frequency of placenta abruption and its consequences can be reduced by proper and effective family planning education and improving antenatal care.

Keywords: Grand MultiPara, Multiparity and Placental abruption.

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INTRODUCTION

Parity is defined as the number of births, both live born neonates and stillbirths, of at least 20 weeks of gestation.¹ The international federation of Gynaecology and Obstetrics (1993) defines grand multiparity as delivery of the fifth to ninth viable pregnancies. Multipara is defined as woman who has previously delivered two to four babies².

The term grandmultipara was introduced in 1934 by Solomons who called the grandmultipara the "Dangerous multipara".³ In developing countries incidence of grandmultiparity (GMP) is between 10%-30%.¹¹ While in developed countries grand multiparity is becoming rare 2-4% of all births.⁴ High parity is associated with serious consequences to the fetus, the mother, the family and abruption is defined as bleeding following premature separation of a normally sited placenta. This would be diagnosis clinically by presence of all of followings (vaginal bleeding, abdominal pain, uterine contraction and tenderness), on ultrasonography and by examining the retroplacental clots after the delivery of the baby and placenta. Abruption is a significant cause of maternal and perinatal morbidity, and perinatal mortality. The death is approximately 12 % (versus

0.6% in non-abruption births)⁵. The majority of perinatal deaths (up to 77%) occur in utero; deaths in the postnatal period are primarily related to preterm delivery.⁶ However, perinatal mortality associated with abruption appears to be decreasing.

METHODOLOGY

Study Setting: Department of Gynecology & Obstetrics Allied Hospital, Faisalabad Medical University, Faisalabad.

Duration: 6 months 1st Jan 2016, to 30th June 2016.

Sample size: 425 patients

Study Design: Descriptive case series.

Sample Selection:

Inclusion Criteria

All pregnant women having previously two or more babies presenting in emergency department with antepartum haemorrhage due to placental abruption.

Exclusion Criteria

Woman having antepartum haemorrhage due to placenta previa or local causes.

Data collection procedure

After taking approval from hospital ethical committee, patients admitted in emergency who

fulfilled the inclusion criteria were enrolled in study and informed consent was taken. Parity was recorded, based on which patients were divided into multipara and grandmultipara groups according to operational definition. Initial evaluation of the patients was done by taking detailed history and clinical examination including general physical examination, per abdominal. Placental abruption was diagnosed clinically (tense tender abdomen antepartum haemorrhage, fetal heart abnormalities and maternal vitals). The other causes antepartum haemorrhage were of placental abruption ruled out by ultrasonography and local examination. The Data was collected on specially designed proforma.

RESULTS

This study was conducted in the department of Gynaecology and Obstetrics, Allied hospital, Faisalabad. A total of 425 cases fulfilling the inclusion/exclusion criteria were enrolled to find the frequency of placental abruption in multiparous women and comparison of frequency between grand multipara and multipara.

Age distribution of the patients was done which show that 239(56.24%) were between 18-30 years and 186 (43.76%) were between 31-40 years of age, mean±sd was calculated as 29.16±5.68 years. (Table No. 1)

Table 1: Age distribution (n=425)

Age (in years)	No. of patients	%
18-30	239	56.24
31-40	186	43.76
Total	425	100
Mean±sd	29.16±5.68	

Parity distribution was presented in Table No. 2, where 263(61.88%) patients were multipara and 162(38.12%) patients were grand multipara, mean±sd was calculated as 4.11±1.54 paras. (Table No. 2)

Table 2: Parity distribution (n=425)

Parity	No. of patients	%
Multipara	263	61.88
Grand Multipara	162	38.12
Total	425	100
Mean±sd	4.11±1.54	

Frequency of placental abruption was found to be 2.58% (11 patients). In our study out of these 11 patients 3 (0.71%) were multipara and 8 (1.88%)

were grandmultipara. P-value was calculated as 0.02 which was significant. Our study showed significantly increased frequency of Placental Abruption with increasing parity.

Table 3: Comparison of placental abruption between grandmultipara and multipara (n=425)

Complications	Multipara		Grand Multipara	
	No. of patients	%	No. of patients	%
Placental abruption	3	0.71	8	1.88
P Value	0.02			

Table 4: Frequency of placental abruption among multiparous women (n=425)

Complications	No. of patients	%
Placental Abruption	11	2.58

DISCUSSION

Grandmultiparity is a high risk pregnancy with complications as anemia, placental abruption, malpresentations, increased maternal and fetal morbidity. Grandmultiparity is a burning issue faced by developing countries like ours where there is lack of education and antenatal care.⁷

In our study frequency of placental abruption was 2.58% out of these 8 patients were grand multipara and 3 were multipara which is three times in grandmultipara seen same results were in the study conducted in 2015 by Asma Qamar JPMG Karachi.¹ In our study more cases of placental abruption were seen in older women but this increase had been attributed to parity and was independent of age. This is comparable to another study by Navti OB, in 2011.⁸ There was high prevalence of placental abruption in granmultipara along with perinatal morbidity and mortality then in low parity group which was comparable to another study conducted by Andrew H Mgaya in 2013.^{4,9,10} Our study showed significant risk of placental abruption in grandmultipara as compared to low parity women which was comparable to another studies.^{11,12}

CONCLUSION

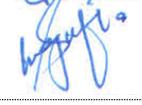
Lack of contraceptive measures, closely spaced pregnancies, poor diet, poverty and inadequate health care facilities all predispose to increased maternal complications due to grandmultipara. It was concluded that frequency of placenta abruption

and its consequences can be reduced by proper and effective family planning education.

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