

FREQUENCY OF PLACENTA PREVIA IN MULTIPAROUS WOMEN

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Abstract

Objective:

To determine the frequency of placenta previa among multiparous women presenting in the third trimester of pregnancy.

Study Design:

Descriptive cross-sectional study.

Setting:

Department of Obstetrics & Gynecology, Khyber Teaching Hospital, Peshawar.

Duration:

January 23, 2016 to July 22, 2016.

Material and Methods:

Out of 236 multiparous pregnant women aged 25–35 years with gestational age ≥ 34 weeks were included through non-probability consecutive sampling. Women with previous cesarean section, history of dilation and curettage, myomectomy, cervical procedures, or multifetal pregnancy were excluded. All participants underwent a detailed clinical examination and trans-abdominal ultrasonography by an experienced sonologist to confirm or rule out placenta previa. Data were collected on a structured proforma and analyzed using SPSS version 16. Mean \pm SD was calculated for quantitative variables while frequencies and percentages were computed for categorical variables. Chi-square test was applied with p -value ≤ 0.05 considered significant.

Results:

Out of 236 multiparous women, placenta previa was identified in 20 cases, giving a frequency of 8.47%. The mean maternal age was 29.75 ± 3.25 years. Placenta previa was more common in women aged above 30 years; however, the association was not statistically significant ($p=0.196$). Increased frequency was observed with higher parity, though no significant association was noted ($p>0.05$).

Conclusion:

Multiparity is associated with an increased frequency of placenta previa. Early identification through routine antenatal care and ultrasonography can assist in timely planning and prevention of complications.

INTRODUCTION

Placenta previa is defined as the attachment of the placenta in the lower uterine segment such that it partially or completely covers the internal cervical

os. It is a major cause of antepartum hemorrhage and is linked with significant maternal and fetal morbidity. It may result in life-threatening complications such as massive hemorrhage,

preterm birth, fetal growth restriction and increased perinatal mortality¹. The reported incidence of placenta previa ranges between 0.3% and 0.5% of all pregnancies, but higher rates are observed in developing countries due to high maternal age, multiparity, and poor antenatal care². The condition is diagnosed through ultrasonography, which remains the gold standard for localization of the placenta³. Multiple risk factors have been associated with placenta previa including previous cesarean delivery, multiparity, advanced maternal age, previous uterine surgeries, and a history of placenta previa⁴⁻⁶. Among these, multiparity has been recognized as a significant independent risk factor. Repeated pregnancies may result in increased endometrial scarring and poor vascular remodeling, predisposing to abnormal placental attachment in the lower uterine segment⁷.

Although extensive literature is available on risk factors for placenta previa, data focusing specifically on multiparous women in the Pakistani population remains limited. Therefore, this research was conducted to determine the current frequency of placenta previa in multiparous women attending to a tertiary care hospital in Peshawar. Findings from this study may help in improving antenatal risk assessment and management strategies to reduce morbidity and mortality.

MATERIAL AND METHODS

This descriptive cross-sectional research was conducted in the Department of Obstetrics and Gynecology, Khyber Teaching Hospital, Peshawar, from January 23, 2016 to July 22, 2016. A total of 236 multiparous pregnant women aged between 25 and 35 years with gestational age of ≥ 34 weeks were included using non-probability consecutive sampling.

Inclusion Criteria:

- All pregnant women aged 25–35 years
- Multiparous women (2nd pregnancy or more)
- Gestational age ≥ 34 weeks (Ultrasound confirmed)

Exclusion Criteria:

- History cesarean section.
- History of dilation and curettage.
- Previous myomectomy or pelvic surgery
- History of cervical procedures
- Multifetal pregnancy

Following obtaining ethical Authorization from the hospital committee, informed documented consent was taken from each patient. A detailed medical and obstetric history was recorded. Trans-abdominal ultrasound was performed by an experienced sonologist to detect placenta previa. Data was entered into SPSS version 16. Quantitative data was analyzed using mean and standard deviation. Qualitative data was analyzed using frequencies and percentages. The Chi-square test was applied following stratification, and statistical significance was set at $p \leq 0.05$.

RESULTS

out of 236 multiparous pregnant women were evaluated. Placenta previa was found in 20 women, giving an overall frequency of 8.47% (Fig No 1). The mean maternal age was 29.75 ± 3.25 years (range 25–35 years). Substantial proportion of the women were in the age group of ≤ 27 years (31.4%), followed by 28–30 years (26.7%), 31–33 years (24.2%) and ≥ 34 years (17.8%) (Table no 1). Parity ranged from 2 to 8 pregnancies. Most of the women (53.8%) had parity less than 4, while 30.9% had parity between 4–6 and 15.3% had parity of more than 6 (Fig No 2).

Placenta previa was slightly more frequent in women with higher parity and older age groups but this association was not statistically significant ($p=0.196$ for age and $p=0.185$ for parity) (Table 2,3).

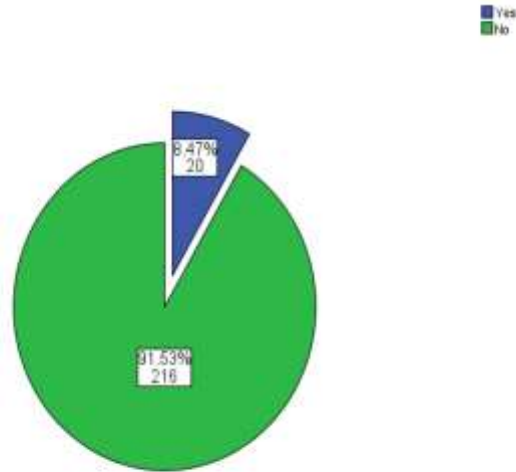


FIGURE NO 1. Frequency placenta Previa (n=236).

TABLE NO 1. AGE wise distribution (n=236).

Age	Frequency	Percent	Mean \pm SD
≤ 27.00	74	31.4	29.75 \pm 3.25
28.00 - 30.00	63	26.7	
31.00 - 33.00	57	24.2	
34.00+	42	17.8	
Total	236	100.0	

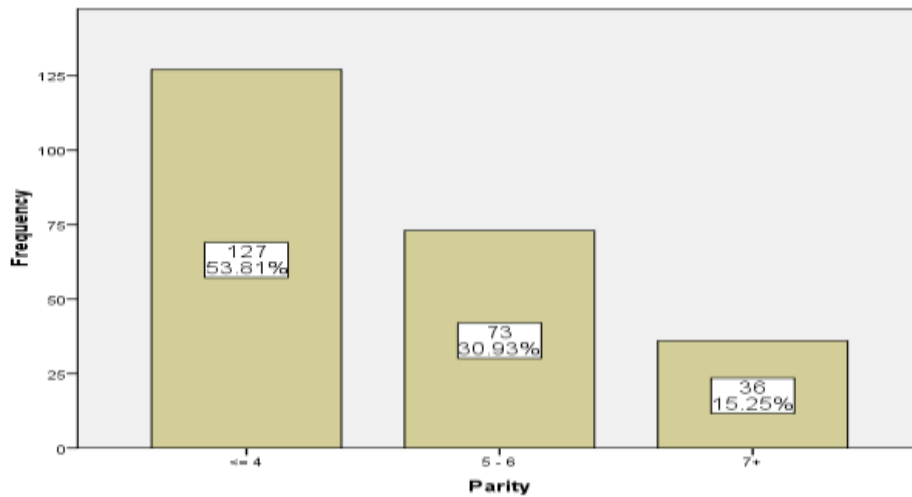


Fig No 2. Parity wise frequency (n=236).

TABLE NO 2. Age wise distribution of placenta previa. (n=236)

Age in years	Placenta Previa		Total	P-value
	Yes	No		
<= 27.00	2 2.7%	72 97.3%	74 100.0%	0.196
28.00 - 30.00	7 11.1%	56 88.9%	63 100.0%	
31.00 - 33.00	6 10.5%	51 89.5%	57 100.0%	
34.00+	5 11.9%	37 88.1%	42 100.0%	
Total	20 8.5%	216 91.5%	236 100.0%	

TABLE NO 3. Parity and gestational age wise distribution of placenta previa. (n=236)

		Placenta Previa		P-value	
		Yes	No		
Parity.	<= 4	Count	7	120	0.185
		Row N %	5.5%	94.5%	
	5 - 6	Count	8	65	
		Row N %	11.0%	89.0%	
	7+	Count	5	31	
		Row N %	13.9%	86.1%	
Gestational Age (in weeks)	<= 35	Count	2	25	0.850
		Row N %	7.4%	92.6%	
	36 - 37	Count	3	42	
		Row N %	6.7%	93.3%	
	38+	Count	15	149	
		Row N %	9.1%	90.9%	

DISCUSSION

Placenta previa is a serious obstetric condition that contributes significantly to maternal and perinatal morbidity. In the present research, the frequency of placenta previa among multiparous women was

found to be 8.47%, which is higher than the global average reported in literature.

Similar findings have been reported in regional studies where multiparity has been consistently linked with an increased risk of placenta previa^{8, 9}.

Repeated pregnancies are believed to cause endometrial damage, predisposing the placenta to implant in the lower uterine segment¹⁰.

Advanced maternal age is another well-recognized risk factor. In our study, the frequency was higher in women aged above 30 years, although it was not statistically significant. Other studies also support an increased risk in women above 35 years of age^{11,12}.

Early antenatal diagnosis via ultrasound is essential for planning delivery and preventing complications such as severe hemorrhage and emergency hysterectomy¹³. Therefore, multiparous women should be considered high-risk and provided with proper antenatal surveillance and delivery planning.

CONCLUSION

Multiparity is associated with a higher frequency of placenta previa. Early diagnosis through ultrasonography and proper antenatal care is essential to reduce maternal and fetal complications associated with this condition.

REFERENCES

- Oppenheimer L. Diagnosis and management of placenta previa. *J Obstet Gynaecol Can.* 2007;29:261-6.
- Ananth CV, Smulian JC, Vintzileos AM. Placenta previa: epidemiology and risk factors. *Obstet Gynecol.* 2003;188:275-281.
- Taipale P, Hiilesmaa V. Transvaginal ultrasonography in predicting placenta previa. *Ultrasound Obstet Gynecol.* 1998;12:422-5.
- Gilliam M, Rosenberg D, Davis F. Risk of placenta previa with increasing parity. *Obstet Gynecol.* 2002;99:976-80.
- Ahmed K, Malik A. Antepartum hemorrhage due to placenta previa. *Ann King Edward Med Coll.* 2000;2:156-9.
- Sheiner E, Shoham-Vardi I. Placenta previa: risk factors and outcome. *J Matern Fetal Med.* 2001;10:414-9.
- Mgaya AH, et al. Grand multiparity and pregnancy risk. *BMC Pregnancy Childbirth.* 2013;13:241.

Shaikh S. Frequency of placenta previa in multigravida. *IJCRR.* 2014;6:39-43.

Nasreen F. Incidence and outcome of placenta previa. *J Postgrad Med Inst.* 2003;17:99-104.

Cresswell JA. Placenta previa: systematic review. *BJOG.* 2013;120:192-201.

Williams MA. Maternal age and placenta previa. *J Reprod Med.* 1993;38:425-8.

Tabassum R. Risk factors associated with placenta previa. *Med Channel.* 2010;16:276-9.

Oyelese Y, Smulian JC. Placenta previa and accreta. *Obstet Gynecol.* 2006;107:927-41.