



CODEN [USA]: IAJPBB

ISSN: 2349-7750

**INDO AMERICAN JOURNAL OF
PHARMACEUTICAL SCIENCES**<http://doi.org/10.5281/zenodo.3697854>Available online at: <http://www.iajps.com>

Research Article

**RATE OF OCCURRENCE OF PLACENTA PREVIA AMONG
PATIENTS PRESENT WITH NON-SCARRED AND SCARRED
UTERUS**

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¹KGN Teaching Hospital Bannu Township Bannu²DHQ Teaching Hospital Gujranwala**Article Received:** January 2020 **Accepted:** February 2020 **Published:** March 2020**Abstract:**

Objective: The aim of this study is to find out the rate of occurrence of Placenta Previa in the patients who visited KGN Teaching Hospital Bannu due to non-scarred and scarred uterus.

Methods: We conducted a descriptive research work on 114 patients who underwent CS (Cesarean Section) (37 patients were present with non-scarred uterus and 77 patients were present scarred uterus) in Gynecology Department of KGN Teaching Hospital Bannu from March 2017 to November 2019.

Results: Majority of the patients (47.36%) were in the age group of 26-30 years, appeared in period of gestational age from 36 to 40 weeks, were 70.17%, were largely in G2-4, whereas rate of occurrence of placenta Previa with non-scarred uterus was 32.45% (n: 37) patients and rate of occurrence in scarred uterus was 67.54% (n: 77). We found the major degree Placenta Previa in 77.19% (n: 88). There were 5.7% patients of Placenta Previa from the non-scarred uterus and 10.66% patients of Placenta Previa from scarred uterus already presented. Stratification analysis discovered a very high tendency of morbidity rate with rise in the amounts of past rates Cesarean Section.

Conclusion: There was very high rate of occurrence of Placenta Previa in the patients who were visiting our hospital with previously scarred uteruses.

KEY WORDS: Cesarean Section, Scarred Uterus, Stratification, Morbidity, Placenta Previa, Uterus.

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Please cite this article in press Zubaida et al, *Rate Of Occurrence Of Placenta Previa Among Patients Present With Non-Scarred And Scarred Uterus.*, Indo Am. J. P. Sci, 2020; 07(03).

INTRODUCTION:

Placenta Previa is a complication of obstetrics and it normally occurs in 2nd and 3rd trimester of the pregnancy period. This complication can lead to severe maternal morbidity as well as mortality [1, 2]. Placenta Previa is a state in which there is placement of the placental tissue very close to the internal cervix. Disruption by surgical intervention of uterine cavity is an important risk factor for Placenta Previa and abruption of placenta. There is association of about 10% patients of Placenta Previa with the placenta accrete [3-5]. In USA, there is occurrence of Placenta Previa in 0.3% to 0.5% of total pregnancies. The risk increases from 1.5 to 5 times with past history delivery by Cesarean Section. With the increase in the deliveries number, this risk can touch to occurrence of 10%. Although Placenta Previa is relatively not common (prevalence of 3 to 9 per thousand pregnancies), it is one of the important reason of bleeding from uterine during latter stages in duration of gestation. So, it has been acknowledged as a vital determinant of morbidity among mothers as well as poor perinatal outcomes. This condition is life-threatening and it needs multi-disciplinary techniques for proper administration [1, 6-11]. Those females are at highest risk of Placenta Previa who have myometrium injury due to past delivery by Cesarean Section with either posterior or the anterior Placenta Previa overlying the scar of uterus.

The identification of Placenta Previa before the delivery allows the management to decrease the potential maternal morbidity as well as morbidity and mortality of neonates [5, 11-13]. It can be present as bleeding without pain. Ultrasonography normally used to diagnose this complication and its diagnosis can be supplemented by MRI (Magnetic Resonance Imaging) [14, 15]. Precise prenatal detection of influenced pregnancies permits optimal administration because site and timing of delivery, the presence of the blood products, and inclusion of a specialist anesthetist and there can be arrangement of surgical team in advance [13, 16, and 17]. This research work carried out to find out the rate of

occurrence of Placenta Previa in the patients who were visiting our hospital and present with past history of non-scarred and scarred uteruses.

MATERIAL AND METHODS:

The duration of this study was from March 2017 to November 2019 in KGN Teaching Hospital Bannu. We used the non-probability purposive sampling method for the recruitment of the patients of Placenta Previa. A sum of 114 patients of Placenta Previa fulfilling the standard were the participants to find out the rate of occurrence of Placenta Previa in the patients getting treatment in our hospital from past history of non-scarred and scarred uteruses. In the duration of this research work, we performed LSCS in 721 patients with previously scarred uteruses whereas in 645 patients of non-scarred uteruses. The patients of this research were present with age range of 20 to 40 years, suffering from Placenta Previa with previous non-scarred and scarred uteruses.

All the patients were present with singleton pregnancy and they were having the gestational duration of 28 weeks or greater than this. We excluded the patients who were prime-gravidas, suffering from bleeding in their 2nd trimester of pregnancy period and present with scars other than cesarean section like myomectomy. We included the patients who were getting treatment in Gynecology Department after fulfillment of the inclusion criteria. We gathered elaborate data about age of female, parity and total gestational age. We collected all the information on organized Performa.

RESULTS:

We carried out the distribution of the age, 30 patients were in the age group of 20 to 25 years 54 patients were in the age group of 26 to 30 years of age, 26 patients were between 31 to 35 years of age and only 4 patients were in the age group of 36 to 40 years of age. The duration of gestation period discovered that 11 patients were between 28 to 32 weeks, 23 patients were between 33 to 36 weeks and 80 patients were between 36 to 40 weeks of gestation (Table-1).

Table-I: Age Of The Patients With Placenta Previa In Previously Scarred And Non-Scarred Uterus

Age (Years)	No of Patients	% age	Gestational age	No. of patients	%age
20-25	30	26.31%	-	-	-
26-30	54	47.36%	28-32weeks	11	9.64%
31-35	26	22.8%	33-36 weeks	23	20.17%
36-40	4	3.5%	36-40 weeks	80	70.17%
Total	114	100%		114	100%

About the gravidity, 67 patients were between G2 to G4, 42 patients were between G5 to G7 and 5 patients were present greater than G7 (Table-2).

Table-II: Gravidity of Placenta Previa, Types and Frequency

Variables		No (n=114)	Percentage
Gravidity	G2-G4	67	58.77
	G5-G7	42	36.84
	>G7	5	4.38
Placenta Previa	scarred uterus	77	67.54%
	non-scarred uterus	37	32.45%
Type of Previa	Major degree	88	77.19
	Minor degree	26	22.8
Previous C sections	1	18	23.37
	2	26	33.76
	3	29	37.66
	4	4	5.1

Stratification for Placenta Previa in accordance with the past CS was carried out which displayed that out of 114 patients of Placenta Previa, 18 patients were present with the past history of 1 LSCS, 26 patients were present with 2 LSCS, 29 patients were present with 3 LSCS and only 4 patients were present with previous 4 LSCS. The rate of occurrence of Placenta Previa discovered in previously scarred uteruses was 5.7%, whereas this rate of occurrence was 10.66% in non-scarred uteruses. In this current research work, 77 patients present with Placenta Previa were present with past history of CS whereas 37 patients were previous histories of deliveries through vagina. Degree of Placenta Previa stated that 88 patients were present in major degree of Placenta Previa and 26 patients were in the minor degree of Placenta Previa.

DISCUSSION:

There are many severe outcomes of Placenta Previa for both neonate and mother including an enhanced risk of mortality for mother and child, restriction in the growth of fetal, delivery before term, antenatal hemorrhage and they may require transfusion of blood in females or emergency hysterectomy [1, 8, 18-20]. The risk of Placenta Previa is very high in the females present with past history of uterine surgery as cesarean section [21, 22]. We conducted this research work to determine the rate of occurrence of Placenta Previa in females of our setup because the literature regarding this topic is rare but the international data regarding this field is available to some extent. The findings of this research work may be helpful for the population about their awareness of the rate of occurrence of Placenta Previa in the duration of pregnancy in case of both cesarean section or normal delivery through vagina so that specialist in this field can manage these patients accordingly [23, 24].

In this research work, out of 114 patients, majority of the patients (47.36%) were present in the age group of 26 to 30 years of age. Patients available in the gestational period from 36 to 40 weeks (70.17%) were mostly in G2 to 4, whereas rate of occurrence of Placenta Previa in the non-scarred uteruses was 32.45% (n: 37) and rate of occurrence of Placenta Previa in previously scarred uteruses was 67.54% (n: 77). 88 patients (77.19%) were in the major degree of Placenta Previa and 26 patients (22.8%)

were in the minor degree of Placenta Previa. The prevalence of previous cesarean section was also in consideration while stratification discovered a high tendency of morbidity with the rise in the number of cesarean section in past. In this research work, the rate of occurrence of Placenta Previa in patients of non-scarred uteruses was 5.7% whereas as this rate was 10.67% in females present with scarred uteruses. The results of this research work are consistent with the findings of Suknikhom W, who stated that past surgery of uterus were more common in the females of Placenta Previa group as compared to the group of healthy controls [6]. In one other study conducted by Yazdani T discovered that the diagnosis was confirmed in 15.5% (n: 19) patients among 122 patients with past history of cesarean section [25]. In this research work, we found that delivery through cesarean section in past pregnancies has correlation with the Placenta Previa with the following pregnancies.

CONCLUSION:

The findings of this research work concluded that a very high rate of occurrence of Placenta Previa was present in the patients who were getting treatment in our institute present with past history of scarred uteruses.

REFERENCES:

1. Brace V, Kernaghan D, Penney G. Learning from adverse clinical outcomes: major obstetric haemorrhage in Scotland, 2003-05. BJOG.

- 2007;114(11):1388-1396. doi: 10.1111/j.1471-0528.2007.01533.x
2. Getahun D, Oyelese Y, Salihu HM, Ananth CV. Previous cesarean delivery and risks of placenta previa and placental abruption. *Obstet Gynecol.* 2006;107(4):771-778. doi: 10.1097/01.aog.0000206182.63788.80
 3. Smith J, Mousa HA. Peripartum hysterectomy for primary postpartum haemorrhage: incidence and maternal morbidity. *J Obstet Gynaecol.* 2007;27(1):44-47. doi: 10.1080/01443610601016925
 4. Monjok E. Re: Warraich Q, Esen U. 2009. Perimortem caesarean section. *Journal of Obstetrics and Gynaecology* 29:690-693. *J Obstet Gynaecol.* 2010;30(4):428; author reply 9. doi: 10.3109/01443610903560146
 5. MacDorman M, Declercq E, Menacker F. Recent trends and patterns in cesarean and vaginal birth after cesarean (VBAC) deliveries in the United States. *Clinics in Perinatology.* 2011;38(2):179-192. doi: 10.1016/j.clp.2011.03.007
 6. Suknikhom W, Tannirandom Y. Previous uterine operation and placenta previa. *J Med Assoc Thailand = Chotmaihet thangphaet.* 2011;94(3):272-277.
 7. Dandolu V, Graul AB, Lyons A, Matteo D. Obstetrical Hysterectomy, cesarean delivery and abnormal placentation. *J Matern Fetal Neonatal Med.* 2012;25(1):74-77. doi: 10.3109/14767058.2011.565391
 8. Grobman WA, Gersnoviez R, Landon MB, Spong CY, Leveno KJ, Rouse DJ, et al. Pregnancy outcomes for women with placenta previa in relation to the number of prior cesarean deliveries. *Obstet Gynecol.* 2007;110(6):1249-1255. doi: 10.1097/01.AOG.0000292082.80566.cd
 9. Yang X, Li Y, Li C, Zhang W. Current overview of pregnancy complications and live-birth outcome of assisted reproductive technology in mainland China. *Fertility Sterility.* 2014;101(2):385-391. doi: 10.1016/j.fertnstert.2013.10.017
 10. Ikechebelu JI, Onwusulu DN. Placenta praevia: review of clinical presentation and management in a Nigerian teaching hospital. *Nigerian J Med.* 2007;16(1):61-64.
 11. Akram H, Bukhari. AA. Multiple caesarean sections- an association with increasing frequency of placenta Previa. *Biomedica.* 2009;25(1):28-31.
 12. Todman D. A history of caesarean section: from ancient world to the modern era. *Aust N Z J Obstet Gynaecol.* 2007;47(5):357-361. doi: 10.1111/j.1479-828X.2007.00757.x
 13. Lurie S. The changing motives of cesarean section: from the ancient world to the twenty-first century. *Arch Gynecol Obstet.* 2005;271(4):281-285. doi: 10.1007/s00404-005-0724-4
 14. Stanton CK, Holtz SA. Levels and trends in cesarean birth in the developing world. *Stud Fam Plann.* 2006;37(1):41-48.
 15. Betran AP, Merialdi M, Lauer JA, Bing-Shun W, Thomas J, Van Look P, et al. Rates of caesarean section: analysis of global, regional and national estimates. *Paediatr Perinat Epidemiol.* 2007;21(2):98-113. doi: 10.1111/j.1365-3016.2007.00786.x
 16. Memon S, Kumari K, Yasmin H, Bhutta S. Is it possible to reduce rates of placenta praevia? *J Pak Med Assoc.* 2010;60(7):566-569.
 17. Fenwick J, Gamble J, Hauck Y. Reframing birth: a consequence of cesarean section. *J Adv Nurs.* 2006;56(2):121-130; discussion 31-32. doi: 10.1111/j.1365-2648.2006.03991_1.x
 18. Salihu HM, Li Q, Rouse DJ, Alexander GR. Placenta previa: neonatal death after live births in the United States. *Am J Obstet Gynecol.* 2003;188(5):1305-1309.
 19. Vintzileos AM, Ananth CV, Smulian JC, Scorza WE, KnuPlacenta Previa et RA. The impact of prenatal care on neonatal deaths in the presence and absence of antenatal high-risk conditions. *Am J Obstet Gynecol.* 2002;186(5):1011-1016.
 20. Mehboob R, Ahmad N. Fetal outcome in major degree placenta praevia. *Pak J Med Res.* 2003;42(1):3-6.
 21. Ananth CV, Smulian JC, Vintzileos AM. The effect of placenta previa on neonatal mortality: a population-based study in the United States, 1989 through 1997. *Am J Obstet Gynecol.* 2003;188(5):1299-1304.
 22. Schneiderman M, Balayla J. A comparative study of neonatal outcomes in placenta previa versus cesarean for other indication at term. *J Mater Fetal Neonatal Med.* 2013;26(11):1121-1127. doi: 10.3109/14767058.2013.770465
 23. Ronsmans C, Holtz S, Stanton C. Socioeconomic differentials in caesarean rates in developing countries: a retrospective analysis. *Lancet.* 2006;368(9546):1516-1523. doi: 10.1016/s0140-6736(06)69639-6
 24. Pakenham S, Chamberlain SM, Smith GN. Women's views on elective primary caesarean section. *J Obstet Gynaecol Canada.* 2006;28(12):1089-1094.
 25. Yazdani T, Islam A, Nadeem G, Hayat T, Mushtaq M. Frequency of Abnormal Placentation in Patients with Previous Caesarean Section. *J Rawalpindi Med Coll.* 2007;11(1):39-41.