

TITLE PAGE

“A PROSPECTIVE STUDY ON THE MATERNAL OUTCOME IN CASES OF ANTEPARTUM HAEMORRHAGE”**Dr. Sonal Sahni¹, Dr. Asha Solanki², Dr. Manisha Lokwani³**

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Running Title – “A PROSPECTIVE STUDY ON THE MATERNAL OUTCOME IN CASES OF ANTEPARTUM HAEMORRHAGE”

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ABSTRACT

Background and Objectives: The leading cause of maternal mortality in world is obstetric haemorrhage. Antepartum haemorrhage (APH) is defined as bleeding from or into the genital tract after 28 weeks of pregnancy and before delivery of the baby. The aim of the present study were to study the maternal outcome in case of APH. **METHOD:** The study was a prospective and observational study conducted in The NSCB Medical College, Jabalpur from January 2020 to June 2021. Cases of pregnancy complicated with APH were taken. Cases with bleeding before 28 weeks and after delivery of the baby were excluded. Data collected from the records present in Labour ward complex and Medical record section. **RESULTS:** A total 193 cases were presented with APH, among these 61.13% were abruption Placenta, 34.19% were placenta previa, 4.66% cases were undetermined. maternal outcome was favorable in 179(92.75%) patients while 14 patients succumbed .out of 118 cases of abruption placenta ,9 cases (7.62%) died. Out of 66 cases of placenta previa ,3 cases (4.54%) died. Out of 9 cases of morbid adherent placenta ,2 cases (22.22%). **Conclusion:** The morbidity and mortality in pregnancies complicated with APH can be prevented by early diagnosis, proper antenatal planning and terminating the pregnancy in a well-equipped tertiary health care center. **Keywords:** Abruption placenta, placenta previa, Antepartum hemorrhage & perinatal mortality.

INTRODUCTION: Antepartum haemorrhage is defined as bleeding from ,or into,the genital tract in the second half of pregnancy. In the last MBRRACE-UK perinatal mortality surveillance report for birth in 2016, the death rate due to haemorrhage was 0.56 per 100,000 maternities.¹ Haemorrhage is the major cause of severe maternal morbidity in almost all near miss audits in both developed and developing countries. It complicates 2%-5% of all pregnancies. Causes of antepartum haemorrhage. Placenta previa (4-5/1000 of all term pregnancies,Placental abruption (1/80 of all pregnancies, Placenta accreta spectrum(1/300-1/2000) , other causes APH of indeterminate origin vasa previa, Pathology of the cervix – erosion,polyp,tumour. Bleeding from the lower genital tract,Blood stained cervical mucus.

AIMS AND OBJECTIVES: To study the maternal outcome in case of APH.

METHODS: The present study was a prospective & observational study undertaken during a period of 1½ years from 01.01.2020 to 30.06/2021 in 193 cases of antepartum hemorrhage. Only patients with APH > 28 weeks gestational age, willing to participate in study were included.

SAMPLE SIZE: 193 cases In this study, we will select the obstetric cases which have been admitted in the Department of Obstetrics & Gynecology, N.S.C.B. Medical College, Jabalpur, with gestational age \geq 28 week & presenting with antepartum haemorrhage.

INCLUSION CRITERIA :

- All pregnant women beyond 28wks of gestation admitted with APH.

EXCLUSION CRITERIA :

- Patient \leq 28 weeks.
- Patient not willing to participate in study.

DATA COLLECTION AND METHODS: Patients included in the study underwent history taking followed by clinical Examination, and relevant investigations. MMSE score was calculated for each patient. Data thus obtained was recorded in a predesigned questionnaire.

STATISTICAL ANALYSIS: Data was entered on Microsoft excel worksheet. Observation tables prepared using the data were analysed by Graph pad software. Chi square test was used for calculating p values. P value <0.01 was considered significant.

RESULTS:

Table – 01 DISTRIBUTION OF CASES ACCORDING TO AGE WISE GROUP ACROSS CONDITION (N=193)

Age group	Abruption Placenta N=118	Placenta Previa N=66	Morbidly adherent placenta N=9	Frequency	Percentage%
Up to 20	15	05	-	20	10.37%
21 to 25	77	22	2	101	52.34%
26 to 30	25	35	5	65	33.67%
Above 30	01	4	2	7	3.62%
Total	118	66	09	193	100.00%

- This table shows age wise distribution of studied groups. Majority of cases 101 (52.34%) cases were observed in age group 21-25 years comprising 52.34% of total cases, followed by 65 (33.67%) cases in age group 26 -30 years and 15 (10.37%) cases up to 20 years

Table-02 DISTRIBUTION OF CASES ACCORDING TO LOCALITY (N=193)

Locality	Frequency (n)	Percentage%
Rural	139	72.02%
Urban	54	27.97%
Total	193	100.00%

- The percentage of patients of APH from rural areas was 139 (72.02%) and 54 (27.97%) from urban area.

Table-03 DISTRIBUTION & COMPARISON OF CASES ACCORDING TO OBSTETRIC CODE OF THE PATIENTS. (N=193)

Obstetric code	frequency	Abruptio placenta	Placenta previa	Adherent placenta	Percentage %
Primi	62	54	8	0	32.12%
Multi	131	64	58	9	67.87%
Total	193	118	66	9	100.00%

- In our study, out of the 118 patients belonging to abruptio placenta 64 cases were multipara and 54 cases found in primipara.
- Out of the 66 patients belonging to placenta Previa, 58 cases were multipara and 8 cases were primipara.
- Out of the 9 patients belonging to Morbidly adherent placenta, all 9 were multipara, with 8 previous caesarean section & 1 with previous myomectomy scar.
- The chi-square statistic is 22.122. The p-value is 0.01. The result is significant at $p < .05$.

Table-04 Maternal outcome

Maternal Outcome	Maternal survived (n=179)	Maternal Death(n=14)	Frequency (n)	Percentage% Out of type of APH
Abruptio placenta	109 [56.47%]	9 [4.66%]	118	7.62 %
Placenta Previa	63 [32.64%]	3 [1.55%]	66	4.54%
Morbidly adherent placenta	7 [3.62%]	2 [1.03%]	9	22.22%
TOTAL	179 [92.75%]	14 [7.25%]	193	—

- In the present study, maternal outcome was favorable in 179 (92.75%) patients while 14 (7.25%) patients succumbed. Out of 118 cases of abruptio placenta, 9 cases (7.62%) died. Out of 66 cases of placenta previa, 3 cases (4.54%) died. Out of 9 cases of morbid adherent placenta, 2 cases (22.22%) . This result is statistically significant $p < .05$.

DISCUSSION:

AGE In the present study, overall majority 52.34% of the patients were in the age group of 21 to 25 years and 33,67% of the patients were in the age group of 26-30 years. Mean age was 25.5 yrs. In a study by **Yadav MC et al (2019)**², the reported incidence of APH was highest (43.8%) in the age group 25-29 years and the least (10.71%) in the age group more than 35 years. In another study by **Sharmila G et al (2016)**³, they found maximum number of patients were in the age group 20 to 30 years (82.0%).

Sharmila G. et al (2016)³ they found mean age of presentation in abruptio placenta patients was 24.37 years and most of them (67.8%) were below 25 yrs of age.

LOCALITY The Incidence of antepartum haemorrhage amongst patients of rural area was 139 (72.02%) and 54 (27.97%) in urban cases in our study group.

Swetha D, Radha K (2019 July)⁴ in their study titled —Maternal and Perinatal Outcome of Abruptio Placentael stated that most of the cases, 30(out of 41) were from rural areas, unbooked and admitted in emergency.

PARITY In present study the incidence of APH in multipara is 131 (67.87%) and 62 (32.12%) in primipara.

In present study, out of the 118 patients belonging to abruptio placenta, 64 cases were multipara and 54 cases were primipara.

Out of the 66 patients belonging to placenta previa, maximum 58 cases were multipara and 8 cases were primipara.

Out of the 9 patients belonging to Morbidly adherent placenta, all 9 cases were multipara, with 8 previous caesarean section & 1 with previous myomectomy scar. Over all maximum 131 cases found in multipara.

Chakraborty et al⁵ reported that prevalence of APH was higher among multigravidas.

Results of present study are consistent with study of **Cotton et al**⁶ who found that 83.2% of their patients with placenta preavia were multiparous and 16.78% were primiparous.

Sharmila G et al (2016)³ stated that out of 28 cases of abruption, 54% were multiparous and 46% were primiparous.

MATERNAL OUTCOME In the present study the majority of the cases 179 (92.75%) mothers survived but maternal death occurred in 14 (7.25%) cases. Out of the 118 (61.13%) patients belonging to abruptio placenta, 109 (56.47%) cases were maternal survival and in 9 (4.66%)cases maternal death occurred. Out of the 66 (34.19%) patients belonging to placenta previa, 63 (32.64%) cases survived and 3 (1.55%) cases ended in maternal death. Out of the 9 (4.66%)patients of morbidly adherent placenta, 7 (3.62%) cases survived and 2 (1.03%) cases died.

Patel K, Bhatu J, Patel S. et al (2020)⁷ Most cases of abruption placentae were diagnosed clinically; however, USG was performed in almost all the cases to know the size of clot and to decide further management. So, overall maternal outcome (97.5%) was good in their study due to proper intrapartum and postpartum obstetric care, availability of wide range of antibiotics and blood components transfusion at their institute.

Mohapatra S, Thanikkal N. (2020)⁸ in their study titled, A Study of Maternal and Perinatal Outcome in Abruptio Placenta, 11.44 percent patients required ICU admission and monitoring in 112 HDU and the maternal mortality due to various causes was about 6.67 percent, our finding is comparable to these findings.

CONCLUSION: The maternofetal mortality in APH can be reduced by educating the people about various government schemes for pregnant women, about the value of antenatal and postnatal care, benefits of a small family size, awareness of the available schemes and services. Good antenatal and postnatal care, adequately trained medical and paramedical staff, good referral hospital, good transport facility, adequate laboratory, in-house blood bank and institutional delivery can help in decreasing the maternal and fetal morbidity and mortality in APH.

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