

Study of Maternal and Perinatal Outcome in 100 Cases of Abruption Placenta

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Abstract

Background: “Separation of the placenta-either partially or totally- from its implantation site before delivery of the baby”, Abruption placenta is one form bleeding occurs due to premature separation of normally situated placenta. With improvement in medical facilities, early diagnosis, availability of blood transfusion, good anesthesia, proper management of shock and other complication of pregnancy along with liberalization of caesarean section, the rate of maternal morbidity and mortality is gradually on the decline.

Aims and objective

- 1) To study possible etiological factors of Abruption Placenta
- 2) To analyze maternal outcome in the form of maternal morbidity and mortality
- 3) To study perinatal outcome in the form of mortality & morbidity
- 4) To discuss possible preventive measures and future management option

Methodology:

This prospective study was conducted from June 2016 to May 2017 Department of Gynecology and Obstetrics, B.J. Medical college Ahmedabad. Total of 100 diagnosed cases of Abruption placenta were included in the study after obtaining informed consent.

Results:

This is a prospective study of 100 cases of Abruption placenta at our institute. In the present study incidence of Abruption placenta is higher in the age group of 21-30 year that were 66% and more in primi patient. As PIH was most common risk factor of the Abruption placenta accounting for 48%. Most of the patients (89%) were anaemic at the time of admission & majority of them required blood transfusion. On account of complication like PPH (11%) & DIC (16%), AKI (6%) patients needed to be transfused PCV/FFP/PRC/Cryoprecipitate. 5% of cases required ICU monitoring. 4 maternal mortalities (4%) occurred, perinatal mortality was 72%. Such a

high rate was due to IUD which had more occurred in

cases of Abruption placenta leads to poor prognosis as there is late presentation of the patient to the hospital, during which time the disease progresses to an advanced stage.

Conclusion:

It was concluded that Abruption placenta does stand out as a serious condition with manifestation of significant maternal and perinatal morbidity and mortality. These complications can be reduced by provision of antenatal care to every woman at their doorsteps and with improvement in medical facilities, early diagnosis, availability of blood transfusion, good anesthesia, proper management of shock and other complication of pregnancy along with liberalization of caesarean section, the rate of maternal morbidity and mortality is gradually on the decline.

Keywords: Abruption placenta, maternal morbidity, maternal mortality, perinatal mortality

I. INTRODUCTION:

A. Definition:

“Separation of the placenta-either partially or totally- from its implantation site before delivery of the baby”

Defective maternal vessels in the decidua basalis rupture and cause the separation, the damaged vessels cause bleeding which results in a decidual hematoma that can lead to placental separation, destruction of placental tissue and a loss of maternal-foetal surface area for nutrient and gas exchange.

Approximately one third of antepartum bleeding can be attributed to placental Abruption.

Even though there is a very big list of identified risk factors, Abruption is a sudden and unexpected obstetric emergency, not predictable by means of known reproductive risk factors.

It was found that approximately 70% of Abruption cases occur in low risk pregnancies.

B. Methods:

This prospective observational study was conducted at Department of Obstetrics & Gynecology, B.J. medical college, civil hospital, Ahmedabad from 1st June 2016 to 31st May 2017. A detailed history was

taken including previous obstetric history. A Performa was filled up in every case.

The age, gravida status, gestational age, menstrual history, past, family and personal history were all recorded. General physical examination was done in every case.

Obstetrics examination included per abdominal, per speculum and per vaginal examinations after USG.

Routine investigations were carried out. Specific investigations were carried out when required.

Ultrasound was done and details of viability, gestational age, presentation, placenta, effective fetal weight and any gross congenital anomaly were recorded in detail.

Management protocol was recorded in terms of chief complaints of patient, maternal, and fetal condition. Induction if done, mode of delivery ,fetal outcome were all recorded.

Mother and baby both were followed up till discharge.

C. Observation & Discussion

Table:1

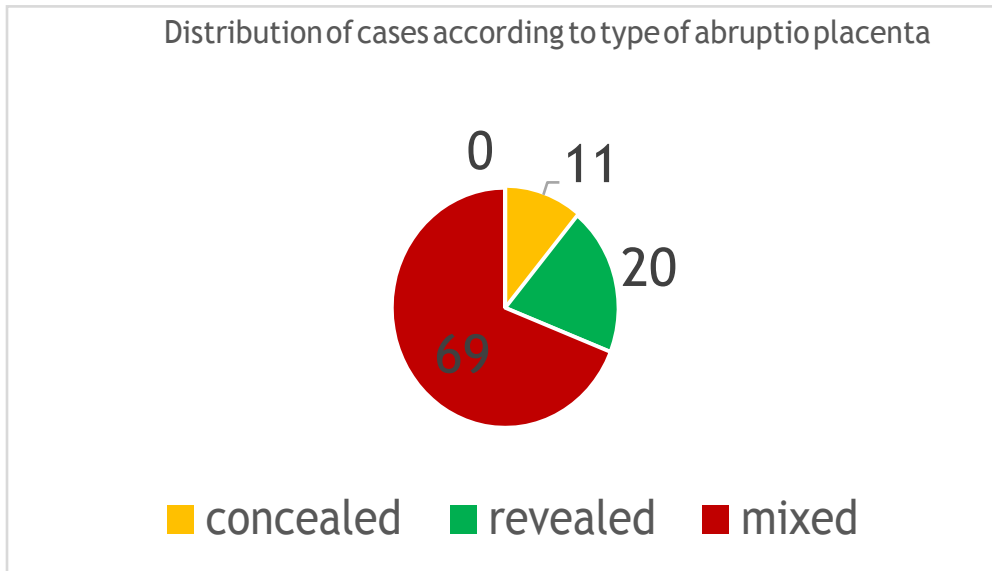


Table1 Shows that in the Present Study, Out of 100 Cases of Abruptio Placenta, there was 69 Cases were of Mixed variety (concealed & revealed), 20 Cases were Presented as a Revealed Variety whereas 11 Cases Presented as Concealed variety. It was Observed that Mixed (69%) Type of Variety is Common Presentation of Abruptio Placenta in our Study.

Table:2

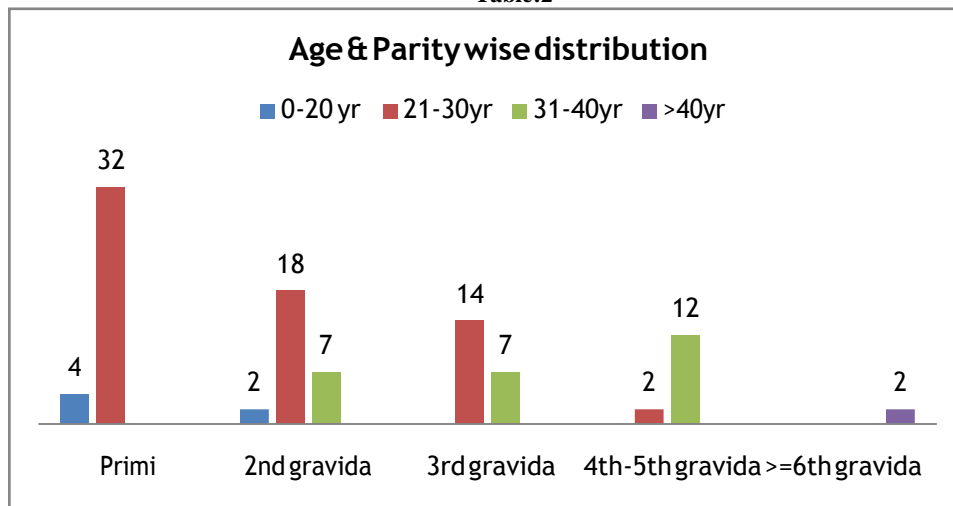


Table 2 Shows that Incidence of Abruptio Placenta is Higher in the Age Group of 21-30 Year (66%) in the Present Study and The Incidence of Abruptio Placenta is Higher in Primi Patient Followed By 2nd And 3rd para Patient.

Table:3

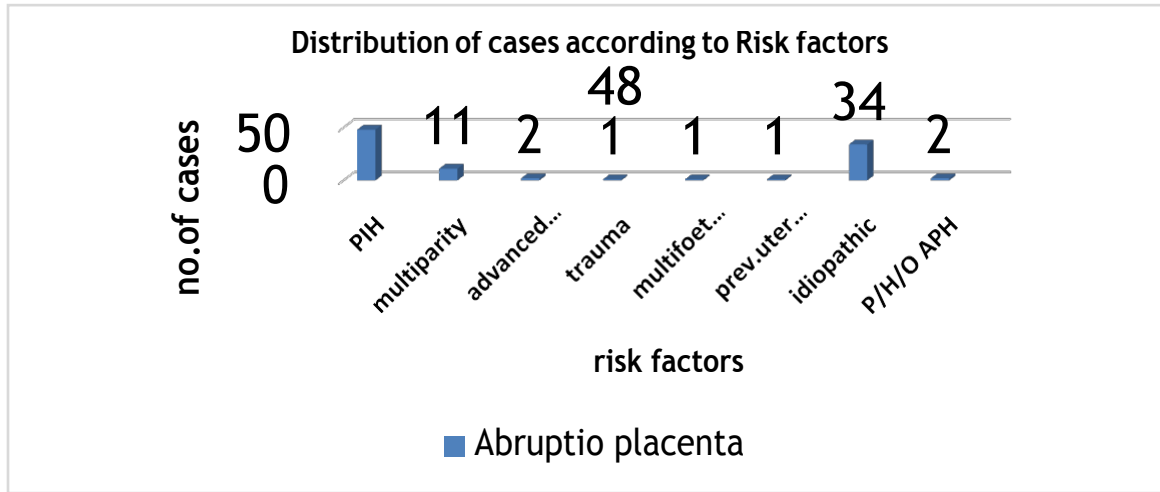


Table3 Shows that in the Present Study PIH was Most Common Risk Factor of the Abruptio Placenta Accounting for 48 Cases out of 100 Cases, Other Risk Factors were Multi Parity, Advanced Maternal Age, Trauma. Multifetal Gestation & Prev. H/O Abruptio etc.,

Table 4 :

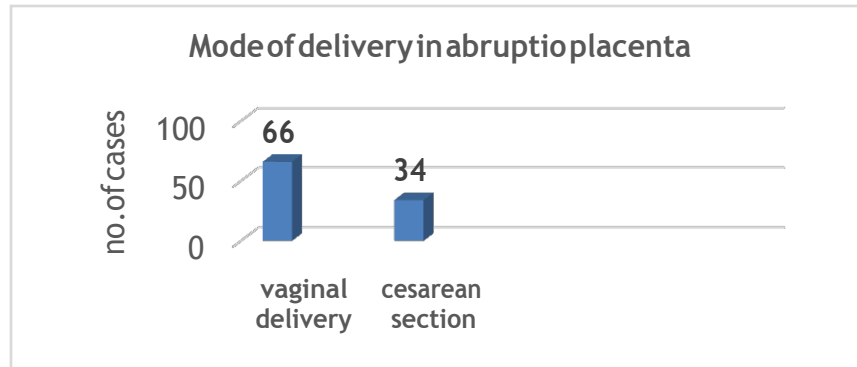


Table 4 shows in Abruptio Placenta, Cesarean Section Rate is 34% which was Mainly to Improve Fetal Salvage and to Reduce Maternal Complications.

Table 5

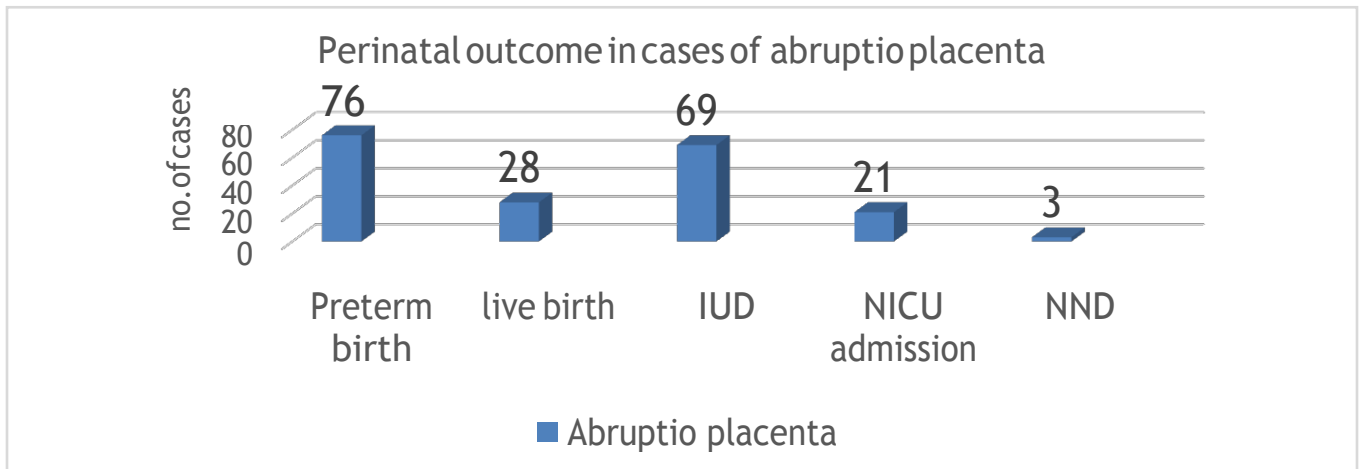


Table5 Results Suggest that there is 72% Mortality in Perinatal(69 IUD+ 3NND).Such High Rate in Utero Compromise Occurs in Accidental Haemorrhage due to Placental Insufficiency Leading to Adverse Perinatal Outcome.

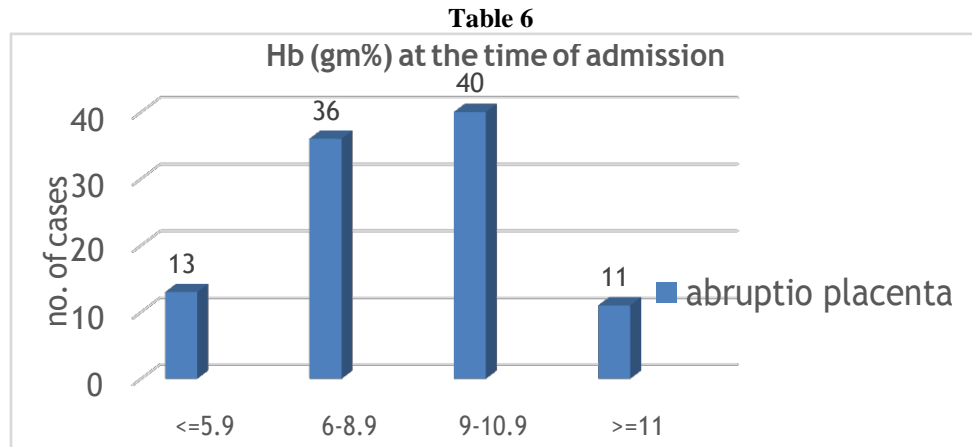


Table6 shows that in the present study most of the patients (89%) were anaemic (<10.9gm%) at the time of admission. These findings suggest that Abruptio placenta causes anaemia & subsequent shock due to blood loss.

Table 7

Complication	Abruptio placenta(n=100)	
	Number	Percentage
Postpartum haemorrhage	11	11%
DIC	16	16%
AKI	6	6%
Shock	9	9%
Wound gap	2	2%
ICU admission	5	5%
Maternal mortality	4	4%

Table7 shows that in the present study, pregnant women with Abruptio placenta were at higher risk for developing complication like PPH (11%), DIC (16%), AKI (6%), Shock (9%) wound gap (2%) and mortality in 4%.

Table 8

	Blood components			
	PCV	FFP	PRC	Cryoprecipitate
Abruptio placenta(n=100)	72	40	28	8

Table8shows that in the present study 72 % of the cases of Abruptio placenta required blood transfusion&40% FFP transfusion, 8% cases required cryoprecipitate transfusion,28% cases required PRC transfusion.

In Abruptio Placenta most of the times uterus contracts but in cases of severe anemia or Couvelaire uterus, uterus become atonic causing PPH & DIC requiring blood component transfusion.

D. Results:

This is a prospective study of 100 cases of Abruptio placenta at our institute during the period of 1st June 2016 to 31st May 2017. Such a high incidence shows that antenatal care started in early pregnancy would help in early detection of cases of patients who are at risk of development of Abruptio Placenta, hereby helping in reduction of maternal and fetal morbidity.

In the present study incidence of Abruptio placenta is higher in the age group of 21-30 year that were 66% & more in primi patient in the present study. (table 2) In the present study PIH was most common risk factor of the Abruptio placenta accounting for 48% cases. (table 3) most cases of Abruptio Placenta were diagnosed clinically, however USG was performed in almost all the cases to know the size of clot & to decide further management.

In the present study, most of the patients (89%) (table 6) were anaemic at the time of admission & majority of them required blood transfusion (table 8). On account of complication like PPH (11%) & DIC (16%), AKI (6%) patients needed to be transfused PCV/FFP/PRC/Cryoprecipitate. 5% of cases required ICU monitoring in the present study (table 7).

In the present study 4 maternal mortalities (4%) occurred (table 7).

In the present study, perinatal mortality was 72% (table 05). Such a high rate was due to IUD which had more occurred in cases of Abruptio placenta leads to poor prognosis as there is late presentation of the patient to the hospital, during which time the disease progress to an advanced stage.

So, over all maternal outcome (96%) was good in present study due to proper obstetric (intrapartum & post-partum) care, availability of wide range of antibiotics & blood components transfusion at our institute.

The present study clearly shows the importance of timely diagnosis and expert management by experienced clinician at all levels will help in improving maternal and fetal outcome in cases of Abruptio placenta.

II. CONCLUSION

Abruptio placenta is a grave and potentially life threatening condition for mother and fetus which tests the limits of even the best equipped obstetrical and neonatal units. Educating the pregnant mother about the importance of antenatal care and easy accessibility to quality antenatal services would go a long way in bringing down the maternal and perinatal morbidity and mortality related with Abruptio placenta. There are no reliable predictors of the timing in pregnancy at which placental Abruptio may happen but when patient came with risk factor like Pregnancy induced hypertension, special attention should be paid & active management should start & when Abruptio placenta diagnosed active team management should be done. Present study indicates that uncorrected anemia still common in India contributing to increased maternal mortality & morbidity and also necessitating high requirement of blood transfusion. There is need for directed efforts for correction of anemia in pregnancy and Abruptio placenta. Introduction of availability of injectable iron at rural level can lead to a major reduction in anemia complicating pregnancy. National Anemia Prevention Programme needs to be modified by incorporating the facility for iron at rural level. In India, it is essential to strengthen the emergency transport facilities from periphery to tertiary care center as correct intervention at the appropriate time in these patients is crucial to bring out a good outcome of pregnancy.

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