



ORIGINAL RESEARCH PAPER

Gynecology

A RETROSPECTIVE ANALYSIS ON RISK FACTORS AND CLINICAL OUTCOME OF SEVERE PLACENTAL ABRUPTION

KEY WORDS: ABRUPTION, RETROPLACENTAL CLOTS, MATERNAL AND PERINATAL OUTCOME

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ABSTRACT

The aim of our study was to determine the various risk factors and fetomaternal outcome in women suffered from placental abruption in our institution - Govt RSRM Lying in Hospital. To define severe placental abruption and to compare serious maternal morbidity profiles of such cases with mild cases of abruption. To determine the need for adequate transfusion, identify complications at the earliest and treat accordingly to reduce maternal morbidity. This is a retrospective study by analysing the cases of abruption placenta in Government RSRM Lying In Hospital from January 2017 to September 2017. Inclusion criteria includes women delivering with all grades of placental abruption in our institution. For these patients statistical analysis and tabulations are made.

INTRODUCTION:

Placental abruption is the most common cause of antepartum haemorrhage and is defined as premature separation of normally implanted placenta after 20 weeks of gestation and prior to the birth of the fetus. Abruption placenta is associated with poor maternal and fetal outcome being determined by severity of placental abruption, gestational age and underlying risk factors..1 The detached portion of placenta is unable to exchange gases and nutrients when the remaining fetoplacental unit is unable to compensate for this loss of function, the fetus is compromised. The incidence appears to be increasing probably due to increase in prevalence of the risk factors for the disorder. Placental abruption is due to rupture of uterine spiral artery. Bleeding into decidua leads to separation of placenta. Hematoma formation further separates the placenta from the uterine wall causing compromise of the blood supply to the fetus. The types are-A-Revealed-blood tracks between the membranes and escapes through the vagina and cervix. B-blood collects behind the placenta with no evidence of vaginal bleeding C- mixed type. It is a serious obstetric condition that increases maternal and neonatal morbidity and mortality. Abruption occurs in 0.4-1% of pregnancies. Obstetric haemorrhage accounts for 1/3rd of maternal death. Perinatal mortality is high with abruption due to its strong association with preterm. Primary cause of abruption is not known.

The existing clinical criteria of severity depends on at least one of the following events: maternal complications like DIC/ HELLP, hypovolemic shock, blood transfusion, renal failure or death and fetal complications like fetal distress, IUGR or fetal death. The main causes include Gestational hypertensive disease, advanced maternal age, increasing parity, multiple gestation, polyhydramnios, PROM/ Chorioamnionitis, trauma/ thrombophilias, smoking, cocaine use.

MATERIALS & METHOD:

This is a hospital based retrospective study by analysing the cases of abruption placenta in Government RSRM Lying In Hospital from January 2017 to September 2017. Inclusion criteria includes women delivering with all grades of placental abruption in our institution. All other causes of APH like placenta previa and other extraplacental causes were excluded.

The aim of our study was to determine the various risk factors and fetomaternal outcome in women suffered from placental abruption in our institution - Govt RSRM Lying in Hospital. To define severe placental abruption and to compare serious maternal morbidity profiles of such cases with mild cases of abruption. To determine the need for adequate transfusion, identify complications at the earliest and treat accordingly to reduce maternal morbidity.

All study patients underwent a complete obstetrical examination and clinical workup including history, general physical examination and abdominal and pelvic examination. Detailed obstetric history was obtained and maternal high- risk factors like PIH, GDM, polyhydramnios was noted. As 95% patients were admitted as emergencies, placental abruption was suspected depending on clinical features of vaginal bleeding, uterine tenderness, hypertonic uterus and diagnosis was confirmed by retroplacental clots. After initial resuscitation mode of delivery was decided depending upon state of mother and fetus. Relevant investigations such as lab tests and imaging were performed. Fetal well-being was assessed with ultrasonography and cardiotocography. Diagnosis was confirmed by the presence of retroplacental clots which was used to estimate the amount of bleeding and severity of abruption. Patients were managed according to the fetal and maternal conditions. All information's were gathered and results were analysed. Maternal complications studied were PPH, DIC, ARF, shock, pulmonary edema and infections. Fetal outcome in the form of perinatal mortality (still births and neonatal deaths), prematurity and admission to the neonatal care unit were studied. For these patients statistical analysis and tabulations are made.

RESULTS:

TOTAL DELIVERIES	7799
TOTAL ABRUPTION CASES	43
SEVERE ABRUPTION	30
MILD ABRUPTION	13
TOTAL INCIDENCE	0.55%

COMPARISON OF VARIABLES BETWEEN MAJOR AND MINOR ABRUPTION:

	MAJOR ABRUPTION 30 cases (69.76%)	MINOR ABRUPTION 13 cases (30.23%)
AGE DISTRIBUTION		
<20 YEARS	1 (3.3%)	1 (7.69%)
20-25 YEARS	11 (36.67%)	6 (46.15%)
25-30 YEARS	14 (46.67%)	5 (38.46%)
>30 YEARS	4 (13.3%)	1(7.69%)
PARITY		
PRIMI	5 (16.67%)	3 (23.07%)
MULTI	25 (83.33%)	10 (76.93%)
FETAL OUTCOME		
LIVE BIRTH	16 (53.33%)	13 (100%)
STILL BORN	3 (10%)	-
IUD	11 (36.67%)	-

RISK FACTORS:

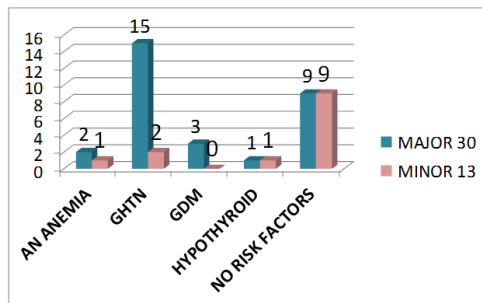


FIG 1: RETROPLACENTAL CLOTS

FIG 2: COUVELAIRE UTERUS



MATERNAL COMPLICATIONS:

VENTILATORY SUPPORT	• 2
NON OLIGURIC RENAL FAILURE	• 3
DIC	• 1
HELLP SYNDROME	• 1
HBeAg +ve/ CHORIOAMNIOTIS	• 1
OLIGURIC AKI → RRT → DEATH	• 1

CONCLUSION:

Abruptio placenta is associated with poor maternal and fetal outcome. Severe abruption was associated with a distinctively higher morbidity risk profile compared with mild abruption. Regular antenatal checkup early diagnosis & identification of risk factors would prevent the maternal and perinatal morbidity and mortality. Team efforts by obstetricians, intensivists and neonatologist is required for better maternal and fetal outcome

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