Short Communication

Outcome of pregnancy in placental abruption

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ABSTRACT

Objective
To determine the effects of placental abruption on the mode of delivery, whether vaginal or abdominal, primary PPH and baby’s weight.

Patients and Methods
This descriptive study included 25 pregnant patients with APH whose clinical diagnosis was placental abruption. Placenta was examined after delivery and labeled as less than 50% abruption, or more than 50%. Mode of delivery, occurrence of primary PPH and weight of baby were recorded. All patients were followed till time of discharge.

Results
Out of 25 women, vaginal delivery occurred in 64% and abdominal delivery in 36%. Primary PPH occurred in 32%, and 28% babies had weight below 2.5kg. But 16% babies had early neonatal death (ENND). No maternal mortality occurred.

Conclusion
Placental abruption had a profound impact on both maternal and perinatal complication including DIC, couvelaire uterus, severe birth asphyxia and perinatal death. (Rawal Med J 2011;36:57-59).

Key Words
Placental abruption, ante partum hemorrhage (APH), primary post partum hemorrhage (PPH), early neonatal death (ENND).

INTRODUCTION
Antepartum hemorrhage (APH) is defined as bleeding from the genital tract after the 20 weeks of gestation and before the delivery of baby, irrespective of the cause and site of bleeding.1 APH complicates 2-5% of all pregnancies and it is one of the main cause of maternal death.2 Important causes of APH are placenta previa (31%), abruptio placentae (22%) and unclassified bleeding (47%).2 Out of late pregnancy deaths more than 50% are due to PPH and the rest due to APH and two third deaths from APH are due to abruptio placentae.1,2 Placental abruption is bleeding after 20 weeks of pregnancy due to premature separation of a normally sited placenta.1,2 The etiology of placental abruption remains an enigma.3,4

PATIENTS AND METHODS
This descriptive study was conducted in Holy Family Hospital during a one year study. The pregnant women presenting with APH after 20 weeks of gestation were included after their informed consent. Women between the age of 20-40 years, both primi and multigravidas with or without PIH and singleton pregnancy were included. After history,
clinical examination and ultrasound findings, patients with abruptio placentae were enrolled in the study. After delivery, placenta was examined thoroughly by attending physician for abruption. The effects of placental abruption on mode of delivery, primary PPH and neonatal birth weight were recorded. Patients were followed till the time of discharge from hospital.

The risks of abruption like PPH, DIC, blood transfusion reaction, anuria, peripartum hysterectomy maternal death and prolonged hospital stay were noted. For baby, weight, severe birth asphyxia and perinatal death were noted. Relevant investigations like coagulation profile and renal function test along with CBC, BSR, routine urine examination, hepatitis B and C were done, wherever needed. Women with gestational age of less than 20 weeks, multiple pregnancy, diabetes, polyhydramnios, external cephalic version, cigarrette smokers, blunt trauma, known case of antiphospholipid antibody syndrome, large size fibroid, preterm premature rupture of membranes and past history of abruption were excluded from the study.

RESULTS
Out of total of 25 women, 10 (40%) showed less than 50% abruption and 15 (60%) showed more than 50% abruption. Vaginal delivery occured in 16 (64%) and abdominal delivery in 09 (36%) women (Table 1). Primary PPH occured in 08 (32%). Seven (28%) babies had weight less than 2.5 kg and 18 (72%) had weight more than 2.5 kg. Eleven (44%) women were non booked and 14 (56%) were booked. Twelve (48%) women were primigravida, 10 were multigravida, three were grand multipara. Primi PPH occured in 16% and four (16%) developed DIC which was treated with FFP and fresh blood, two (8%) had peripartum hysterectomy due to couvelaire uterus.

<table>
<thead>
<tr>
<th>Particulars</th>
<th>LSCS</th>
<th>SVD</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No</td>
<td>%</td>
</tr>
<tr>
<td>Abruption &lt; 50%</td>
<td>02</td>
<td>8</td>
</tr>
<tr>
<td>Abruption &gt; 50%</td>
<td>07</td>
<td>28</td>
</tr>
<tr>
<td>Total</td>
<td>25</td>
<td>09</td>
</tr>
</tbody>
</table>

No maternal mortality occured.
PPH required blood in several women and prolong hospital stay occurred in two (08%) (Table 2). Seven (28%) babies had weight below 2.5kg and Early neonatal death (ENND) occurred in four (16%) babies (Table 3).

Table 3. Effects of abruption on baby.

<table>
<thead>
<tr>
<th>Condition</th>
<th>No</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preterm</td>
<td>07</td>
<td>28</td>
</tr>
<tr>
<td>Weight &gt;2.5 Kg</td>
<td>18</td>
<td>72</td>
</tr>
<tr>
<td>ENND</td>
<td>04</td>
<td>16</td>
</tr>
</tbody>
</table>

DISCUSSION
Harm to the baby is based on the severity of the abruption and whether or not the baby is delivered prematurely. With swift suitable treatment, maternal death is less than 1%. In our study, no maternal death occurred. A very large quantity of blood can be lost during an abruption which would require a lower segment cesarean section and thereby increasing blood loss. Sometimes, disseminated intravascular coagulation (DIC) can occur. In our study, DIC occurred in 16% which is higher than an earlier study. Hysterectomy is reserved as a last resort to control bleeding.

In our study 100% women had blood transfusion. Couvelaire uterus was seen in 8% in our study which is lower than other researchers which was 16%. The most devastating
complication of placental abruption is death of the baby. In our study, ENND occurred in 16%. In conclusion, we found that PPH, DIC and Couvelaire uterus had poor perinatal outcomes. Therefore, placental abruption should be closely monitored and prompt delivery should be carried out at centers with adequate maternal-neonatal intensive care facilities.

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