Primary Post Partum Haemorrhage after Vaginal birth: An Analysis of Risk Factors

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Objective: - To analyze the risk factors for primary post partum Haemorrhage. Settings: - Gynae/Obstetrics-Unit I Lady Willingdon Hospital Lahore. Study Design: - Observational Analytical study. Duration: - One year 1st January 2005 to 31 December 2005. Materials/Methods: - It was an observational analytical study in which the data about patients was collected with the help of proformas. Conclusion: - Uterine atony due to various underlying risk factors is the major cause of post partum Haemorrhage. If these factors are identified and treated accordingly then a lot of mothers can be saved.

Key words: Post Partum Haemorrhage (PPH), Risk factors, Maternal Mortalities/Morbidities.

Post Partum Haemorrhage (PPH) is the most common recognized complication of childbirth, the most nerve racking and demanding the presence of mind of the birth attendants. In Pakistan about 30,000 mothers die each year due to pregnancy and delivery related problems. The major killers of pregnant women in our country are PPH, Eclampsia and Puerperal sepsis.

Primary Post Partum Haemorrhage is defined as blood loss >500 ml within 24 hours after the delivery of baby. The incidence of PPH in developed world is approximately 5%.

The knowledge of causes, related to Antenatal and intrapartum, risk factors, Pathophysiological changes in Hemodynamics and coagulation during pregnancy is essential to manage the condition. At present, efforts are being made to organize a multidisciplinary approach to this complication of delivery involving clinical and laboratory staff. The rapid correction of hypovolemia, diagnosis and treatment of defective coagulation to control the haemorrhage are mandatory and key factor in combating the situation.

Material and Methods:
This is an observational analytical study in which the proformas were developed and filled in. Hundred cases of PPH were observed during the period of one year. The various risk factors which led to PPH were retained placenta, obstructed labour, dais handled cases multifetal gestations, chorioamnionitis, compound fetal presentation still births, forceps deliveries and coagulopathies.

Uterine atony was the major cause of PPH due to most of the above said risk factors.

Results:
100 patients with PPH were observed out of which 80% showed uterine atony due to various risk factors which were as:
Retained Placenta = 50%
Prolonged/Obstructed Labour = 16%
Twin gestation = 5%
Chorioamnionitis = 3%
Intrauterine fetal deaths = 2%

Multiparity (>5) births = 4%
15% patients presented with genital tract trauma and 90% were delivered outside the hospital. Cervical and vaginal tears due to instrumental deliveries were the presenting features. 2 cases presented with tears in posterior lip of cervix, post vaginal fornix and lower uterine segments which were treated by abdomino vaginal approach.

Out of genital tract trauma 3 cases presented with uterine rapture after vaginal birth and were having history of previous caesarean sections. These cases were given trial of labour and delivered outside the hospital.

5% of patients with PPH presented with coagulopathies due to different underlying causes like Jaundice, Hepatic, Failure and disseminated intravascular coagulation as a consequence of PPH.

<table>
<thead>
<tr>
<th>Risk Factors</th>
<th>n</th>
<th>%</th>
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<tbody>
<tr>
<td>Retained Placenta</td>
<td>50</td>
<td>50</td>
</tr>
<tr>
<td>Prolonged/Obstructed Labour</td>
<td>16</td>
<td>16</td>
</tr>
<tr>
<td>Twin Gestation</td>
<td>5</td>
<td>5</td>
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<tr>
<td>Chorioamnionitis</td>
<td>3</td>
<td>3</td>
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<tr>
<td>Intrauterine fetal deaths</td>
<td>2</td>
<td>2</td>
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<tr>
<td>Multiparity (&gt;5)</td>
<td>4</td>
<td>4</td>
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</tbody>
</table>

Discussion:
It has been seen from this study that uterine atony due to various risk factors is the major cause for primary PPH. PPH is an Obstetrical emergency, which needs prompt action. Recognition and management of underlying factors can save lot of mothers from dying. Certain precautions if observed antenatally can also lead to significant reduction in maternal morbidity and mortality. They include:
- Proper antenatal care and identification of high risk category.
- Correction of anemia antenatally.
- Hospital delivery by senior medical personals in case of high risk pregnancies like previous caesarean section, multigravidas, obstructed labour etc.
- Active management of 3rd stage of labour which includes oxytocin injection (10 units) I/V at
delivery of anterior shoulder of baby and controlled cord traction 3.
- Women at risk of PPH should have 2 I/V lines saved with wide bore cannulas during labour and blood must be cross matched and arranged.
- Guidelines for management of PPH protocols must be available in every unit 3.
- Education of pregnant women regarding safe birth is considered to be a key element in prevention of maternal morbidities and mortalities due to PPH 4.
- Traditional birth attendants should be trained to identify the mothers with obstetrical complications and prompt referral to such health facilities which can provide emergency obstetrical care.

Conclusion:
PPH occurs mainly due to atony of uterus due to various underlying risk factors, which should be identified and managed to prevent catastrophes of obstetrics.

References: