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MATERNAL NEAR-MISS –A CASE REPORT ON SUCCESSFUL MANAGEMENT OF INTRACTABLE ATONIC POST PARTUM HEMORRHAGE

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ABSTRACT

Introduction:- Maternal near-miss refers to situations, where women experience severe life-threatening obstetric complications during pregnancy, delivery or post pregnancy, which they survive either by chance or because they receive good care at health facility. Cases of near-miss occur in larger numbers than maternal deaths. It has been estimated that up to 9 million women survive obstetric complications every year, and the consequences of these may be permanent and wide-reaching. Excessive hemorrhage during pregnancy or childbirth and severe hypertensive disorders contribute to large number of cases that result in to serious maternal morbidity.

Case Report:-We present a case of a young primipara, who reported to hospital in a condition of hemorrhagic shock with history of cardiac arrest before admission. She had intractable atonic postpartum hemorrhage, following full term vaginal delivery in private nursing home. She was resuscitated and operated for emergency obstetric hysterectomy with bilateral internal iliac ligation. She developed disseminated intravascular coagulation, which was treated by aggressive blood and component therapy. She went home in a hemodynamic ally stable condition.

Conclusion:-Every obstetrician should intelligently anticipate and keep oneself prepared to tackle the problem of intractable postpartum hemorrhage. Prompt and aggressive management of post partum hemorrhage will save many young lives. A saying ʿDelay means death ʿholds true for such emergency situation.

Keywords: Near miss death, Postpartum hemorrhage, Disseminated intravascular hemorrhage, Maternal mortality

1. Introduction:

Maternal near-miss refers to situations ,where women experience severe life- threatening obstetric complications during pregnancy, delivery or post pregnancy, which they survive either by chance or because they receive good care at a facility. Cases of near-miss occur in larger numbers than maternal deaths - it has been estimated that up to 9 million women survive obstetric complications every year, and the consequences of these may be permanent and wide-reaching[1]. Thus, the concept has become increasingly important for public health scientists working in maternal health, in particular those who seek to better understand the causes of maternal morbidity and death.[1] Postpartum hemorrhage continues to be the commonest direct obstetric cause for maternal mortality in developing countries. In majority of cases, there are some predisposing factors like maternal anemia ,over distension of the uterus, antepartum hemorrhage or prolong labour. But it can occur in the absence of any of the above mentioned risk factors, leading to sudden unexpected deterioration in maternal condition, requiring immediate hospitalization and active interventions to control bleeding.

2. Case Report:

Eighteen year old, primi para was brought to the casualty in an unconscious state, with history of severe vaginal bleeding following full term vaginal delivery at private maternity home, five hours before admission. She had five antenatal visits to the gynecologist in private hospital and received routine antenatal care including iron tablets for anemia prophylaxis .She was from middle socio economic class and had education up to tenth class .She was married for last one year .She had uneventful antenatal period and did not suffer from any pregnancy related complications. She did not have any high risk factor for postpartum hemorrhage. The delivery was conducted by Gynecologist and there was no history of prolong labour or instrumental delivery .The labour was actively managed with oxytocin augmentation .There was no soft tissue trauma to the genital tract, except for the episiotomy operation. She started profuse per vaginal bleeding after one and half hour of vaginal delivery.With the diagnosis of atonic postpartum hemorrhage; she was treated with oxytocic drugs, plasma expanders and two units of blood transfusion. She developed severe hypotension and cardic arrest. She was revived back with administration of inj.Adrenaline. As patients condition further deteriorated, she was shifted to this hospital, five hours after the delivery.

On examination, her general condition was very poor. Her pulse and blood pressure were not recordable in upper extremities .Her pupils were semidilated and were sluggishly reacting to light. She had severe pallor, cold clammy extrimities and gasping respiration. Her clothes were soaked with blood and there was a pool of blood underneath her body. Per abdominal examination revealed flabby uterus .Understanding the criticalility of the case, she was immediately shifted to operation theatre after obtaining necessary consent for exploratory laparotomy and obstetric hysterectomy, if required necessary. She was resuscitated with plasma expanders and inj.Dopamine infusion. Exploratory laparotomy was carried out under general anesthesia .The uterus was very flabby and did not show any response to oxytocic drugs. As a life saving measure, decision of emergency obstetric hysterectomy was taken .Patients condition continued to be unsatisfactory during surgery .Her blood pressure was 60 mm of systolic and diastolic was not recordable, with heart rate of 170 per minute .She was pumped with one and half liters of plasma expanders and five units of whole blood transfusion and eight units of fresh frozen plasma through central intravenous line. Patient developed coagulation failure due to severe blood loss. There was oozing from the vaginal vault and peritoneal surfaces, due to disseminated intravascular coagulation (DIC). As an additional measure for controlling the pelvic hemorrhage, bilateral internal iliac ligation was done. Intraperitoneal drain was kept. Her initial blood investigations revealed Hb of 3 grams percent, normal renal (Bl. urea, S. Creatinine, S. Uric acid) and liver functions (SGOT, SGPT, S. Bilirubin). Serological investigations revealed non reactive status for HbsAg antigen HIV and VDRL tests. Her prothrombin time was derranged to 41 seconds. Her platelet count was 50 thousand on the day of admission. After the operation, patient was shifted to intensive care unit for further management .She was kept on ventilator for 24 hours following surgery .Dopamine support continued for forty eight hours .She received total 15 units of whole blood, 24 units of fresh frozen plasma and one unit of single donor platelet during first 72 hours of admission .Patient showed signs of improvement in the form of hemodynamic stability on third postoperative day. She was given higher antibiotics in the form of combination of Inj. Piperacillin and Inj. Vancomycin intravenously for five days. Patient had iatrogenic complication in the form of traumatic pneumothorax on right side, while putting central venous line. It was detected in ICU in post operative period and was managed by intercostal drain. Air entry improved on right side following the drain. Her blood investigations were repeated every alternate day. Her renal and liver functions showed temporary derangements. She had febrile episodes twice following surgery, which were managed by antipyretic drugs. She had retention of urine and overflow incontinence following removal of urethral catheter on fifth post operative day. It was managed conservatively.She started breast feeding her baby on fifth postoperative day and had adequate lactation. Intercostal drain was removed on tenth post operative day. Laparotomy stitches were removed on eleventh postoperative day and patient was discharged. Her hematological and hemodynamic parameters were normal at the time of discharge from the hospital .She was advised to come for follow up visit for postoperative check up and counseling.

3. Discussion:

Obstetric emergencies occur suddenly and unexpectedly and endanger the life of mother. Atonic postpartum hemorrhage is one such condition. Its incidence is about 1% amongst hospital deliveries.[2]It is responsible for 15-20 % of maternal deaths in developing countries.[2]Obstetrical conditions like polyhydramnios, multifetal pregnancies, antepartum hemorrhage, prolong labour, grand multi gravida and medical conditions like anemia, hepatitis and pregnancy induced hypertension complicating pregnancy ,predispose pregnant women to have atonic postpartum hemorrhage. Present case was delivered by gynecologist in her private maternity home. On recognition of the problem of atonic post partum hemorrhage, she tried her best to control the hemorrhage with the established management protocol. In addition, the higher center was intimated about the transfer of sick case .Two units of blood and four units of plasma expanders were administered before shifting the patient. In spite of these measures, patient had reported to higher center in very sick condition. It shows that, there was an element of delay, which resulted in serious morbidity leading to near miss situation. WHO defined maternal near miss as– "a woman who nearly died but survived a complication that occurred during pregnancy, childbirth or within 42 days of termination of pregnancy".[3]Signs of organ dysfunction that follow life-threatening conditions are used to identify maternal near misses. [4] The reported prevalence of near miss has ranged overall from less than 1 per 1000 live births to 82 per 1000 live births, with rates in resource poor settings ranging from four to eight percent of hospital-based deliveries [5,6]. Souza (2006) reports a mean for near miss cases of 8 per 1000 live births[7]. In safe motherhood literature, delays are commonly divided into three consecutive time periods: the first delay in deciding to seek medical care on the part of the individual or family; the second delay in reaching a facility; and the third delay in receiving adequate care. Identification of these high risk factors during antenatal visits and their timely correction or treatment can reduce the incidence of this complication. Health workers and doctors working at primary health care centers must be sensitized on the issue of early recognition of high risk pregnancies and their timely referral to higher centers. General practitioners and specialist doctors running private maternity homes must understand the limitations of their set ups while dealing with these emergencies. They must refer these cases in timely manner before serious complications occur. They must keep watch on the vital parameters while managing these cases and arrange for referral to higher center without undue delay. Prior communication with the referral center and the concerned specialist will help in reducing the likelihood of delay at the higher center. Delay at various levels increases the morbidity and mortality. Referral chit with clear mention about the treatment administered and the vital parameters noted at the time of shifting, can help in avoiding subsequent medico legal litigations. Accompanying a very sick patient, whenever possible till higher center, is a good practice and shows your concern towards the wellbeing and safety of the patient.

Conclusion:

Every obstetrician should intelligently anticipate and keep oneself prepared to tackle the problem of intractable postpartum hemorrhage. Prompt and aggressive management of post partum hemorrhage can save many young lives. Regular antenatal check up, identification of high risk factors, institutional deliveries ,prevention of delays at all levels, up gradation of facilities at secondary and tertiary referral levels and improvement in blood banking facilities will go a long way in reaching the dream of achieving the millennium development goal (MDG 5) in the given time frame.

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