



Case Study: 28 - Years - Old Women with Primary Postpartum Hemorrhage

Ms. Santosh Kumari¹, Ms. Chetna Kumari², Dr. Jasbir Kaur³, Ms. Harpreet Kaur⁴

¹Assistant Professor, Department of Obstetrics & Gynaecological Nursing, Maharishi Markandeshwar College of Nursing, Maharishi Markandeshwar University, Solan, India.

²Associate Professor, Department of Child Health Nursing, Maharishi Markandeshwar College of Nursing, Maharishi Markandeshwar University, Solan, India.

³Dean & Principal, Department of Mental Health Nursing, Maharishi Markandeshwar College of Nursing, Maharishi Markandeshwar University, Solan, India.

⁴Professor Cum Vice- Principal, Department of Mental Health Nursing, Maharishi Markandeshwar College of Nursing, Maharishi Markandeshwar University, Solan, India.

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ABSTRACT

Postpartum hemorrhage is defined as the blood loss of more than 500 ml following a vaginal delivery or more than 1000 ml following cesarean section. Primary PPH occurs within 24 h of delivery, whereas secondary PPH occurs after 24 h to 6 weeks of delivery. According to World Health Organization in developing countries 60% of maternal deaths were due to PPH. Risk factors were prolonged third stage of labor, retained product of placenta, maternal age more than 35 years, gestational age below 37 weeks or above 41 weeks, pregnancy-induced hypertension, having previous history of PPH. Identify patients who are at increased risk for postpartum hemorrhage, this life-threatening complication often occurs in those patients who had no identifiable risk factors.

Keywords: Primary Postpartum Hemorrhage, Blood Loss, Management.

Introduction

World health organization defined postpartum hemorrhage (PPH) as the blood loss of more than 500 ml following a vaginal delivery or more than 1000 ml following cesarean section. Further it is also defined as any amount of vaginal bleeding following delivery that causes vital sign disturbance from normal values or loss of 10% hemoglobin from the baseline.¹ Primary PPH occurs within 24 hours of delivery and Secondary PPH occurs after 24 hours of delivery till 6 weeks.² Worldwide PPH is the major cause of maternal mortality and morbidity which accounts more than 25% of deaths annually. According to World Health Organization in developing countries 60% of maternal deaths were due to PPH.³

The major risk factors which contribute to PPH are uterine atony Further Anaemia in pregnancy is common that linked to postpartum hemorrhage in terms of uterine atony. The more severe the anemia, the more likely the greater blood loss and adverse outcome⁴ and a prolonged third stage of labor, retained product of placenta, maternal age more than 35 years, gestational age below 37 weeks or above 41 weeks, pregnancy-induced hypertension, having previous history of PPH, uterine rupture, abruptio placenta, placenta previa.⁵

Efforts to identify patients who are at increased risk for postpartum hemorrhage, such life-threatening complication often occurs in those patients who had no identifiable risk factors.⁶ Therefore, careful observation is important after all deliveries.

Case Presentation

A 28 years old female was admitted in the labour room on 27/09/2024 at 7 p.m. with the chief complaints of amenorrhea since 9 months, lower backache since 1 day, abdominal pain since 1 day. On per vaginal examination female was 4 cm dilated. On 28/09/2024 at 2 a.m. she delivered baby boy with birth weight of 2.9 kg. APGAR score was normal but the cry of baby was delayed.

There was no significant history of prolonged labour, trauma, delayed in placental separation and tear.

Past Medical History

There was no significant history of Gestational Diabetes Mellitus, Pregnancy Induced Hypertension, Tuberculosis, Hepatitis, Sexually Transmitted Diseases, HIV and Other Communicable Diseases.

Past Surgical History

There was no significant history of any general, Gynaecological surgery except there was history of right mediolateral episiotomy incision.

General Examination

Weight- 65kg

Height – 160cm

BMI – 25.03Kg/m²

On examination uterus was flabby, atonic, heavy vaginal bleeding was present and further on per vaginal speculum examination there was no vaginal and cervical tear present. Mother was restless, pale a lethargic and drowsy.

Vital Signs

Temperature – 97.3°F

Pulse – 110 beats/minutes

Respiration – 24 breath/minute

Blood Pressure –85/50 mm/hg

SPO₂ – 93%

Pain – sever pain on lower abdomen assessed by pain rating scale (Score was 7 on numeric rating scale).

Special Investigation – Hb Estimation Test including TLC & RBC, Electrolyte Test including Serum Sodium, Potassium, and Chloride was done.

Treatment & Management

Started Normal Saline Drip with Oxytocin for 1 hour, I did fundal massage, Injection Methargine 0.2 mg IV given, Injection Trenaxa 1g IV given, Catheterization was done, 2 L NS was infused.

Patient was stable after the treatment and management.

Management of PPH includes multidisciplinary approach which includes good communication, an obstetrician, perinatologist, anaesthesiologist, haematologist and interventional radiologist, for accurate assessment of blood loss, monitoring of maternal signs and symptoms, fluid loss, blood and blood product replacement, and to find out the source of PPH.^{7,8}

Initially maternal monitoring needs to be done which includes heart rate and electrocardiography (ECG), blood pressure (BP), respiratory rate, and peripheral oxygen saturation followed by body temperature and urine output monitoring. Further need to assessmen fluid loss and blood volume.⁹

Once a woman is admitted for delivery, if there is a risk factor for the development of postpartum hemorrhage than insert two large-bore intravenous cannula, a complete blood count should be obtained, and a specimen should be sent to the blood bank. Notify the blood bank that get ready with the at least 2 units of blood and cross-matched for the patient. If the patient is at very high risk for postpartum hemorrhage, central venous and arterial catheters should be placed. Although both crystalloids and colloids can be used as intravenous fluids, crystalloids are slightly favored over colloids.⁶

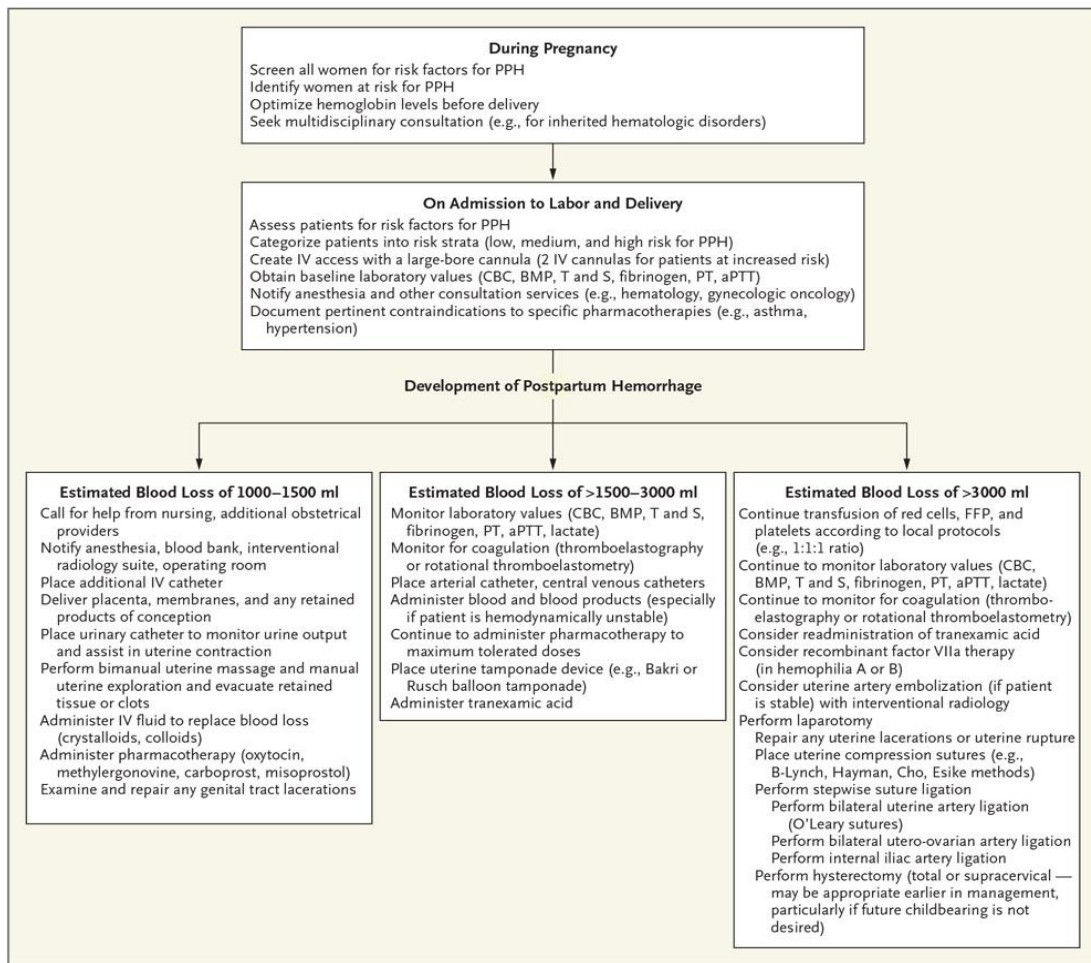


Figure 1: Postpartum Hemorrhage (PPH) Screening, Evaluation, and Management.

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