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Original Research Article

A Rare Presentation of Acute Inversion of Uterus and PPH- A Maternal 'Near Miss' Case

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Abstract:
Introduction: Maternal "near-miss" refers to surviving severe pregnancy complications, requiring innovative problem-solving and more resources. Postpartum haemorrhage (PPH) is a major health risk, a leading cause of maternal death
The Case: Mrs. R. J., 32 years, $G_2P_1L_1A_0$, previous uncomplicated vaginal delivery presented at 38.4 weeks gestation with a normal antenatal course. Labour was induced with vaginal misoprostol, resulting in the successful vaginal delivery of a healthy 3.5 kg baby with routine preventive measures for postpartum hemorrhage. However, she experienced acute spontaneous uterine inversion post-delivery, leading to severe PPH despite attempts at repositioning the uterus and administration of halothane for relaxation. Compounded by her bronchial asthma, preventing the use of carboprost, intractable bleeding persisted, resulting in significant blood loss. With approximately 1.3 litres lost, emergency postpartum hysterectomy became imperative to save her life. This critical intervention was executed through a collaborative "Team Approach" involving obstetricians, anesthesiologists, cardiologists, pediatricians, and perioperative generalists, highlighting the importance of multidisciplinary care in managing obstetric emergencies.
Result: Following emergency postpartum hysterectomy, 4 units PRBC and 8 FFP transfusions, the patient successfully recovered.
Conclusion: Prompt identification, timely intervention, a coordinated team approach, and urgent management of PPH are critical for improving maternal outcomes and saving lives.

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Introduction

Maternal "near-miss" refers to women who have escaped death either due to chance or good health care after experiencing severe life-threatening complications during pregnancy which can manifest unexpectedly, with varying severity. Predictable complications typically benefit from established protocols and mitigation strategies. [1-3] However, Unexpected, or Accidental complications pose greater challenges, demanding innovative problem-solving approaches which require increased Resource Allocation. PPH constitutes a major health risk and is one of the leading causes of maternal death. [4-7]

The Case: Mrs. R. J., 32 years, $G_2P_1L_1A_0$, previous uncomplicated vaginal delivery, a booked case with regular ANC was admitted on 16/01/2024 in early labour at 38 weeks 4 days. She took folic acid, iron, and calcium supplements regularly. She is on inhaler for bronchial asthma. [8]

On examination, her BP was 110/70 mmHg, Pulse - regular, 94b/m, SpO_2 99%, temp- 97°F, P+I- C- C- E-, CVS: S_1 S_2 audible, no added sounds heard. Respiratory system: B/L vesicular breath sounds heard - 18/min. P/A: Uterus term sized, mild contractions present, cephalic presentation, longitudinal lie, FHR: 146b/m, regular, P/V: Os parous, Show present.

Investigations: Blood Gr: 'O'-positive, Hb: 11.4 gm%, Viral Serology: negative, VDRL: non-reactive, Euglycaemic, Urine R/E M/E: WNL, USG: 2nd trimester Anomaly Scan was normal. 3rd trimester growth scan suggested Liquor volume

adequate, Foetal maturity 38 wks 3 days, estimated wt: 3.6 kg, cephalic presentation. Placental maturity Grade III, normal in size, placed fundal with normal echotexture, nuchal cord found. [9,10]

Management:

Labor was augmented with 25 mcg vaginal misoprostol, resulting in smooth progress and successful vaginal delivery of a healthy 3.550 kg baby after 10 hrs of labour, mother was slightly exhausted. Nuchal cord released from the neck, clamped, cut - Baby resuscitated by neontologist. Inj. Carbetocin 100 mcg given i/m. However, Acute partial Spontaneous Inversion of Uterus occurred at the time of delivery while givingmild fundal push, may be due to traction on apparently shortened nuchal cord. Patient went into Neurogenic Shock immediately. Placenta found Morbidly Adherent (PAS) which was NOT diagnosed in USG. Abdominal palpation revealed Cupping of Fundus. Attempts of repositioning the uterus after administration of halothane for uterine relaxation failed. Severe PPH started. Compounded by her bronchial asthma, preventing the use of inj. Carboprost, intractable bleeding persisted, resulting in approximately 1.3-liters blood loss. Immediate Emergency Postpartum Hysterectomy became imperative to Save her Life. This critical intervention was executed through a collaborative "Team Approach" involving Obstetricians, Anaesthesiologists, Cardiologists, Neonatologists, and perioperative Generalists, highlighting the importance of “Multidisciplinary Care” in managing Obstetric Emergenciess.

Result

Following Emergency Postpartum Hysterectomy, the patient received 4 units of PRBC and 8 units of FFP. Through this critical intervention, the patient was able to recover successfully with Hb 9.2 gm% on day 4.

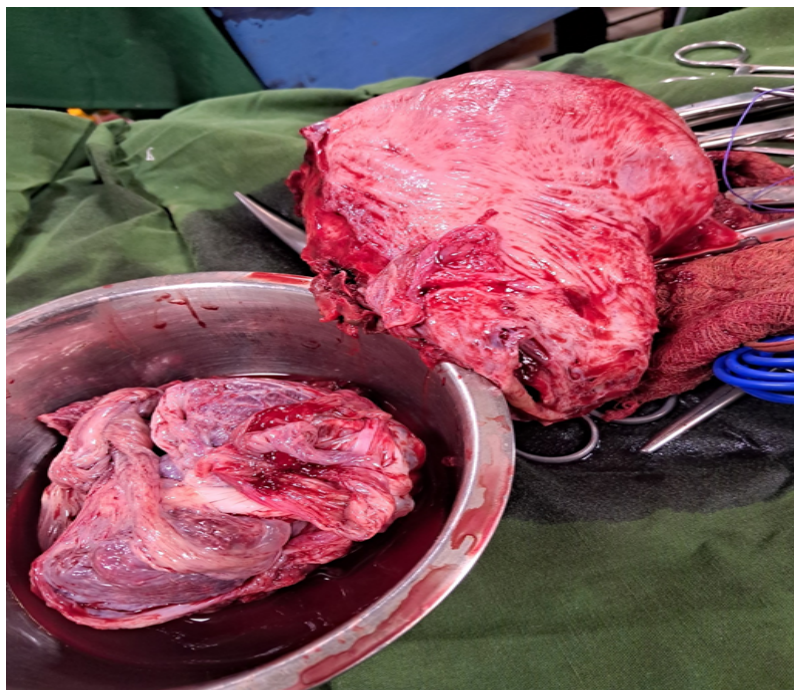

Figure 1: Post partum hysterectomized uterus.

Conclusion

Prompt Identification, Timely Intervention, Coordinated Team Approach, and Urgent management of postpartum hemorrhage (PPH) stand as crucial pillars in enhancing maternal outcomes and potentially saving lives. With Organised efforts from Healthcare Professionals, including Obstetricians, Midwives, Nurses, and other Specialists, Effective Strategies can be implemented promptly to combat “NEAR MISS CASES”

References

1. Krakowiak P, Smith EN. Risk factors and outcomes associated with a short umbilical cord. Obstet Gynecol. 2004;103(1):119-27.
2. Wendel MP, Shnaekel KL, Magann EF. Uterine Inversion: A Review of a Life-Threatening

Obstetrical Emergency. Obstet Gynecol Surv. 2018Jul;73(7):411-417.
3. Coad SL, Dahlgren LS, Hutcheon JA. Risks and consequences of puerperal uterine inversion in the United States, Am J Obstet Gynecol. 2017;217(3): 1-377.
4. Bakshi S, Meyer BA. Indications for and outcome of emergency peripartum hysterectomy. A five-year review. J Reprod Med. 2000; 45(9):733–737.
5. Zelop CM, Harlow BL, Frigoletto FD, Safon LE, Saltzman DH. Emergency peripartum hysterectomy. Am J Obstet Gynecol. 1993; 168: 1443–1448.
6. Miller DA, Chollet JA, Goodwin TM. Clinical risk factors for placenta previa-placenta accreta. Am J Obstet Gynecol. 1997;177(1):210–214.
7. Combs CA, Murphy EL, Laros RK. Factors associated with post partumhemorrhage with vaginal birth. Obstet Gynecol. 1991;77(1):69–76.
8. Fitzpatrick K, Sellers S, Spark P, Kurinczuk J, Brocklehurst P, Knight M. The management and outcomes of placenta accreta, increta, and percreta in the UK: a population-based descriptive study. BJOG Int J Obstet Gynaecol. 2014;121(1):62–71.
9. Jauniaux E, Jurkovic D. Placenta accreta: pathogenesis of a 20th century iatrogenic uterine disease. Placenta. 2012;33(4):244–251.
10. Irving C, Hervig AT. A Study of Placenta Accreta. Surg Gynecol Obstet. 64th ed. 1937; 178–200.