

# Emergency Peripartum Hysterectomy as Life Saving Surgery for Postpartum Haemorrhage in Women with Single Kidney - A Case Report

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**Abstract:-**

➤ **Introduction**

Emergency peripartum hysterectomy a life saving surgery involving irretrievable removal of uterus which is performed in setting of life threatening haemorrhage during or immediately after caesarean or vaginal deliveries.

➤ **Case Report**

A 25year old primi with 38 weeks + 4days gestation period with post right nephrectomy came with complaints of pain abdomen and backpain since 2 hours. No complaints of white discharge PV/Burning micturition/Bleeding PV/leaking PV. Perceiving foetal movements well.

➤ **Conclusion**

In light of severe intractable uterine haemorrhage, When conservative management is failed, Hysterectomy is the immediate and unavoidable best treatment.

**Keywords:-** Post Partum Hemorrhage, Single Kidney, Hypovolemia, SubtotalHysterectomy

## I. INTRODUCTION

Postpartum hemorrhage is Most common cause of maternal death for about 35 % world wide

- Incidence after vaginal delivery- 2-4 %
- After cesarean- 6 percent
- Rural areas is 12percent
- Multiparity 15 percent
  
- Who defines pph as, blood loss that is more than or equal to 500 to 100ml ml in vaginal deliveries and more than 1000ml as severe pph or 1000 ml in cesarean section.
- ACOG defines blood loss of more or less 1000ml or bleeding with s/s of hypovolemia and

The following Picture shows the Causes of the primary postpartumhemorrhage

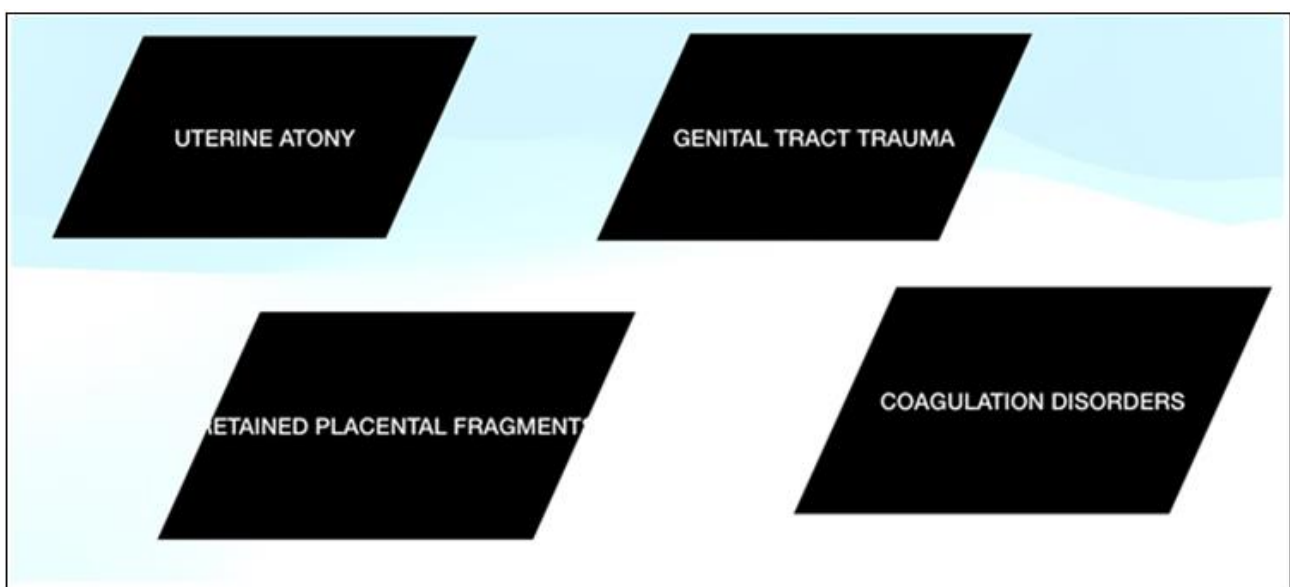


Fig 1 The Causes of the Primary Postpartum Hemorrhage

Emergency peripartum hysterectomy is a life saving surgery involving irretrievable removal of uterus during life threatening hemorrhage .

Performed when all conservative measures were failed to achieve hemostasis. Most common indications are placenta accreta, atonicity, uterine rupture.

- Hence early recognition and intervention are crucial for management of ooh for lowering the risk and improving the clinical outcomes.

#### A. Case Report :

##### ➤ Patient Information and Clinical Findings :

25 year old primi 38wk +4days with post right nephrectomy came with complaints of pain abdomen and back pain since 2hrs with no comorbidities and other imminent signs and symptoms. Patient was apparently normal and lab reports were normal with no signs of albuminuria and apparently normal hypertensive profile. Patient has no high recordings of her blood pressure during her antenatal period. She progressed accordingly from latent phase to active phase of labour. Patient was then shifted to OT for emergency cesarean section due to the arrest in the descent and delivered a viable baby girl of weight :3.65kgs. After the delivery of placenta uterine atony noted causing the postpartum hemorrhage leading to severe blood loss.

##### • On General Examination :

Pallor was 3+

Fall in the blood pressure noted. Pulse rate -122bpm

Arriving to probable diagnosis

- ✓ Relaxed and flabby uterus- Atonic postpartum Hemorrhage
- ✓ Contracted but uterine bleeding -traumatic postpartum Hemorrhage
- ✓ Undelivered placenta/partial expulsion/ incomplete placenta - partial or total retained placenta
- ✓ Non palpable fundus of uterus -inversion of uterus
- ✓ Contracted uterus with absence of Trauma and absence of retained placenta -DIC

##### • On Examination:

Uterus was flabby and enlarged.

##### ➤ Diagnosis :

Diagnosis of ATONIC PPH was made.

##### ➤ Treatment :

##### • Pharmacological Interventions -

Oxytocin 5iu IM was given along with the IV infusion of 10units followed by another 10units IV infusion, simultaneously Tablet misoprostol 200micrograms was given sublingually, uterus was still flabby then IM methergine was given along with the tranexamic acid 1gm IV dosage, yet the atonicity persisted.

##### • Procedural Interventions-

Bimanual uterine massage, packing, intrauterine balloon tamponade done. B lynch compressions sutures done but Persistent bleeding and refractory hypotension noted.

Massive transfusion initiated and right IJV cannulated and Noradrenaline infusion was started. Surgeons and urologists were called in. STEP WISE

DEVASCULARIZATION done. Bleeding persisted with deranging vitals and hence proceeded with emergency peripartum hysterectomy due to severe atonic pph.

Blood loss-1800-1900ml noted. 3 units PRBC, 4 units FFP and 7 units cryoprecipitate transfused. Cystoscopy done. Tortuous left proximal ureter noted. Left DJ stent placed. Abdominal drain placed. Skin closed.

##### ➤ Follow Up and Outcomes :

Perioperative antibiotic prophylaxis continued for 24–48 hours. Thromboprophylaxis with heparin instituted after the hemostasis was secure. Patient was extubated on POD-1 and discharged on POD-10 . Her bladder and bowel function was normal

## II. DISCUSSION

Emergency peripartum hysterectomy – Incidence is 1 per 1000

##### ➤ Indications-

Intractable uterine atony, abnormal placentation, surgical trauma /tears. Obstetric hemorrhage -2<sup>nd</sup> direct cause of maternal death.

Atonic Postpartum hemorrhage remains the leading cause of emergency peripartum hysterectomy, and rupture of unscarred uterus due to obstructed labour.

Hysterectomy is most commonly preferred to arrest or prevent the hemorrhage from the above indications.

It is most commonly indicated in the cesarean sections but also some times after the vaginal deliveries also.

Uterine atony - despite the development of uterotonics, there are the conditions where there might be refractoriness to those drugs too, commonly present in the prolonged, augmented and/or obstructed labor: simply stated, the exhausted and infected uterus may be unresponsive to oxytocic agents.

##### ➤ Abnormal Placentation –

Most common in scarred uterus. In addition, on rare occasions, concealed abruptio placentae may be associated with extravasation of blood into and through the full thickness of the myometrium (Couvelaire uterus) to such an extent as to make it unresponsive to oxytocic drugs, thus necessitating hysterectomy. In majority of cases of abruptio placentae with Couvelaire uterus, the response to

oxytocic drugs is appropriate and the hemorrhage is due to DIC rather than failure of the uterus to contract.

➤ *Other Causes Include Uterine Rupture or any other Trauma*

In our case after uneventful cesarean delivery, patient developed PPH which in initial stage was treated medically. In view of failure of these measures to control persistent bleeding and deteriorating condition of patient, decision for emergency hysterectomy was taken. Considering the hypovolemic shock we decided to take patient under general anesthesia in such a way that the drugs and techniques used to anesthetize the patient were optimally safe.

Subtotal or total hysterectomy can be done. complications of

peripartum hysterectomy include greater blood loss and risk of urinary tract damage. Blood loss is usually appreciable because hysterectomy is being performed for hemorrhage that frequently is torrential, and the procedure itself is associated with substantial bleeding.

Although many cases with hemorrhage cannot be anticipated, those with abnormal implantation are often identified antepartum. Subtotal hysterectomy report lesser blood loss. Complications such as injury to other organs are less common with supracervical hysterectomy as the bladder and ureters are further from the operative site. consideration of hysterectomy is recommended when conservative measures are failed.



Fig 2 Shows The Intraoperative Picture During the Procedure of the Subtotal Hysterectomy.





Fig 3 Shows the Specimen of the Uterus Along with the Fallopian Tubes after Performing the Procedure.

➤ *Prevention of PPH*

- Active management of third stage (amstl) prevents pph.
- Administration of uterotonic agent. ( 10 units of oxytocin IM).
- Delivery of placenta by controlled cord traction following oxytocin administration.
- Assessment of uterine tone and size.
- Delayed cord clamping.
- It is a prophylactic intervention recommended by WHO.
- Proper management of 4th stage.
- 1-2 hours after delivery look at the uterine tone and contraction.
- Look for vulval hematoma, bladder distension., pph and postpartum collapse, monitor urine output and other vitals should be checked.

➤ *Recommendations for Management of PPH*

- Zero hour
- Once women assessed for pph call for emergency response team for help
- Multidisciplinary team management
- Resuscitation, stabilization, Identification of potential cause and treatment initiated during golden 1st hours
- Resuscitation with principles of basic and advanced life support to be followed.
- Initial Resuscitation
- Airway, Breathing, Circulation, Disability, Exposure
- Secure at least two large-bore IV catheters so that crystalloid with oxytocin can be continued simultaneously with blood products.
- Insert a Foley catheter for continuous urine output monitoring.
- Monitor pulse, bp, respiratory rate.

➤ *Complications of a Solitary Kidney in Pregnancy;*

- Gestational hypertension
- Preeclampsia
- Recurrent Urinary tract infections
- Preeclampsia associated Maternal and Fetal complications
- In congenital solitary kidney conditions, the patient may be associated with other reproductive Tract abnormalities.
- Pyelonephritis.
- Preterm births.
- Spontaneous abortions.
- IUGR
- Renal fibrosis
- Chronic kidney disease. In our case , patient was apparently normal throughout the antenatal period and there are no Fetal complications also.

### III. CONCLUSION

This case demonstrated the quickly initiated postpartum hemorrhage protocol interventions necessary to prevent maternal mortality. In case of severe intractable uterine haemorrhage ,hysterectomy is immediate and unavoidable best treatment, failing which delay may contribute to maternal mortality and morbidity.

Patients with solitary kidney require close monitoring throughout their antenatal and postpartum period to avoid any deterioration of renal function.

### DECLARATION

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- *Informed Consent*- Not applicable Author Contributions- none to declare
- *Data Availability*-Data supporting the findings of this study are available within the article.

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