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CURRENT STATUS OF POSTPARTUM HYSTERECTOMY: INDICATIONS, OUTCOMES, AND MODERN MANAGEMENT

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ABSTRACT

Emergency postpartum hysterectomy (EPH) is a life-saving surgical procedure performed to control severe obstetric hemorrhage when conservative measures fail. Despite advances in obstetric care, EPH remains associated with significant maternal morbidity and mortality, particularly in low-resource settings. Over the past decades, the epidemiology and indications for EPH have evolved, with placenta accreta spectrum disorders emerging as the leading cause in many regions, replacing uterine atony. This article aims to review the current status of postpartum hysterectomy, focusing on epidemiology, pathophysiology, risk factors, clinical outcomes, and modern management strategies. The study highlights the importance of early recognition, multidisciplinary care, and preventive obstetric practices in reducing the need for hysterectomy.

Keywords: postpartum hysterectomy, obstetric hemorrhage, placenta accreta, uterine atony, maternal mortality, obstetrics

INTRODUCTION

Emergency postpartum hysterectomy (EPH) refers to the surgical removal of the uterus performed immediately after delivery or within the puerperium to control life-threatening hemorrhage. It is considered a last-resort intervention when all conservative treatments fail.

Postpartum hemorrhage (PPH) is the leading indication for EPH and remains one of the major causes of maternal mortality worldwide. According to the World Health Organization, approximately 25–30% of maternal deaths globally are related to hemorrhage.

Historically, uterine atony was the primary cause of EPH. However, recent trends indicate a shift toward abnormal placentation, particularly placenta accreta spectrum (PAS), largely due to increasing cesarean section rates.

Understanding the modern landscape of EPH is essential for improving maternal outcomes and guiding preventive strategies.

MATERIALS AND METHODS

This study is a narrative review of peer-reviewed articles from PubMed, Scopus, and Web of Science databases.

Inclusion Criteria:

- Studies published between 2010 and 2025
- Articles focusing on postpartum hysterectomy
- Studies reporting epidemiology, indications, and outcomes

Data Collected:

- Incidence rates
- Indications and risk factors

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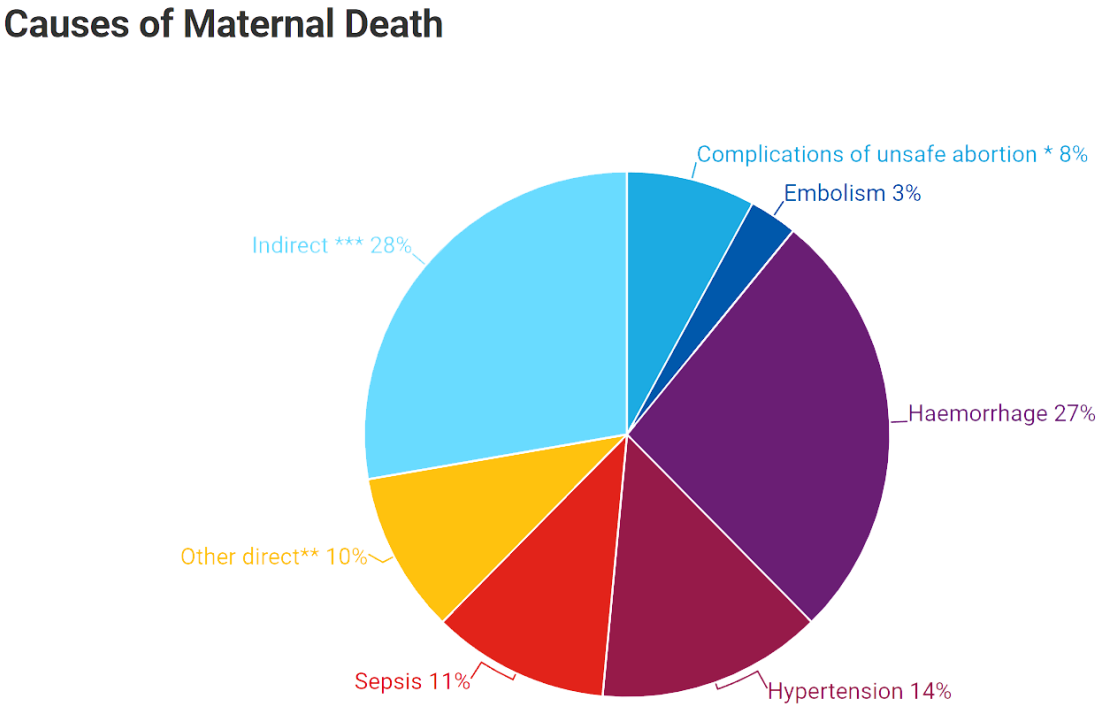
- Maternal and fetal outcomes
- Management approaches

RESULTS

1. Epidemiology of Postpartum Hysterectomy

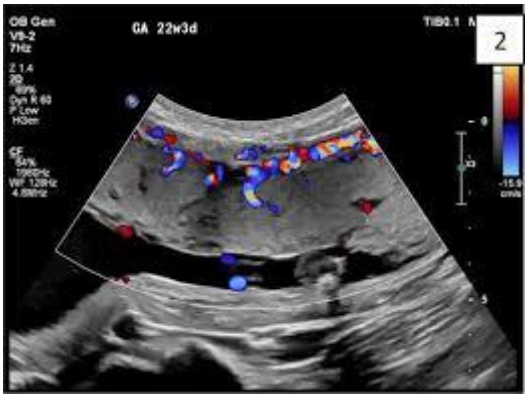
The incidence of EPH varies widely depending on healthcare resources and obstetric practices:

- Global incidence: 0.2–5 per 1000 deliveries
- Higher rates in developing countries
- Lower rates in high-resource settings due to improved care



Source: Say L et al., 'Global causes of maternal death: a WHO systematic analysis' *Lancet Global Health*. **http://dx.doi.org/10.1016/S2214-109X(14)70227-X**, May 6, 2014.

Notes: *Nearly all (99 per cent) of abortion deaths are due to unsafe abortions. **Includes deaths due to obstructed labour or anaemia. *** Indirect causes are medical causes such as pre-existing conditions aggrevated by pregnancy.



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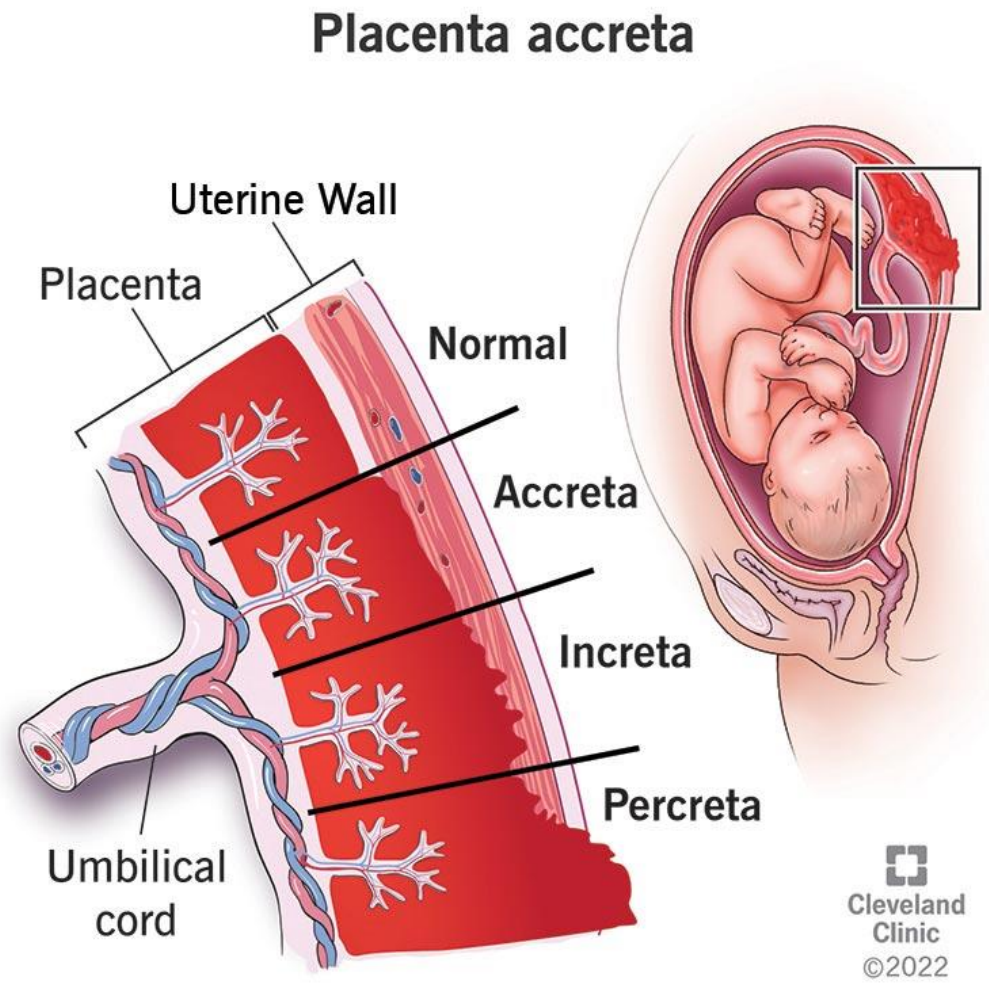

The variation reflects differences in:

- Access to emergency obstetric care
- Blood transfusion availability
- Surgical expertise

2. Indications for Postpartum Hysterectomy

a. Uterine Atony

Failure of the uterus to contract after delivery leads to massive hemorrhage. Although still common, its relative contribution has decreased due to effective uterotonic agents.

b. Placenta Accreta Spectrum (PAS)

PAS disorders include placenta accreta, increta, and percreta. These conditions involve abnormal placental attachment to the uterine wall, leading to severe bleeding during placental separation.

c. Uterine Rupture

Often associated with previous cesarean sections or obstructed labor, uterine rupture is a catastrophic event requiring immediate surgical intervention.

d. Other Causes

- Placenta previa
- Severe infection
- Traumatic delivery

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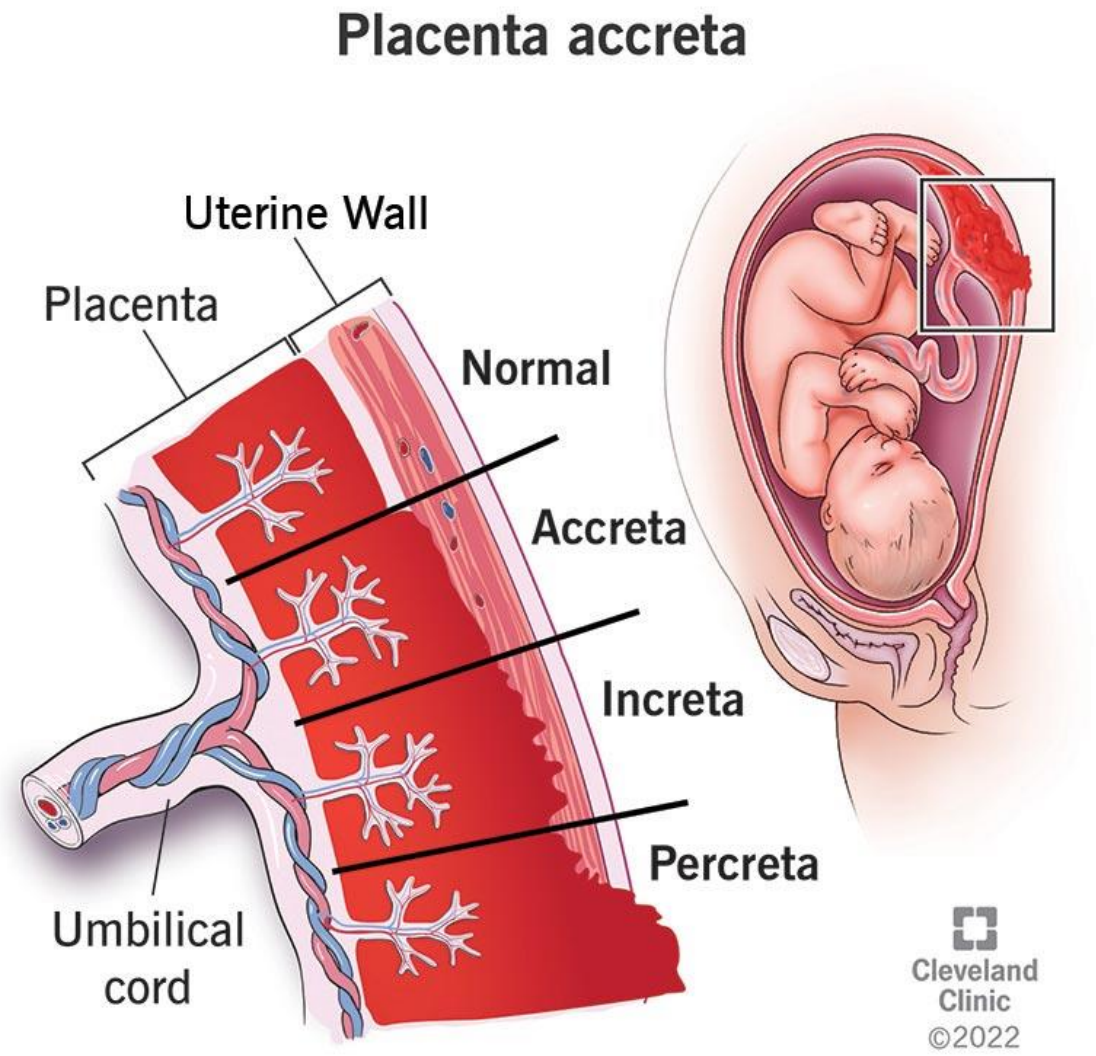

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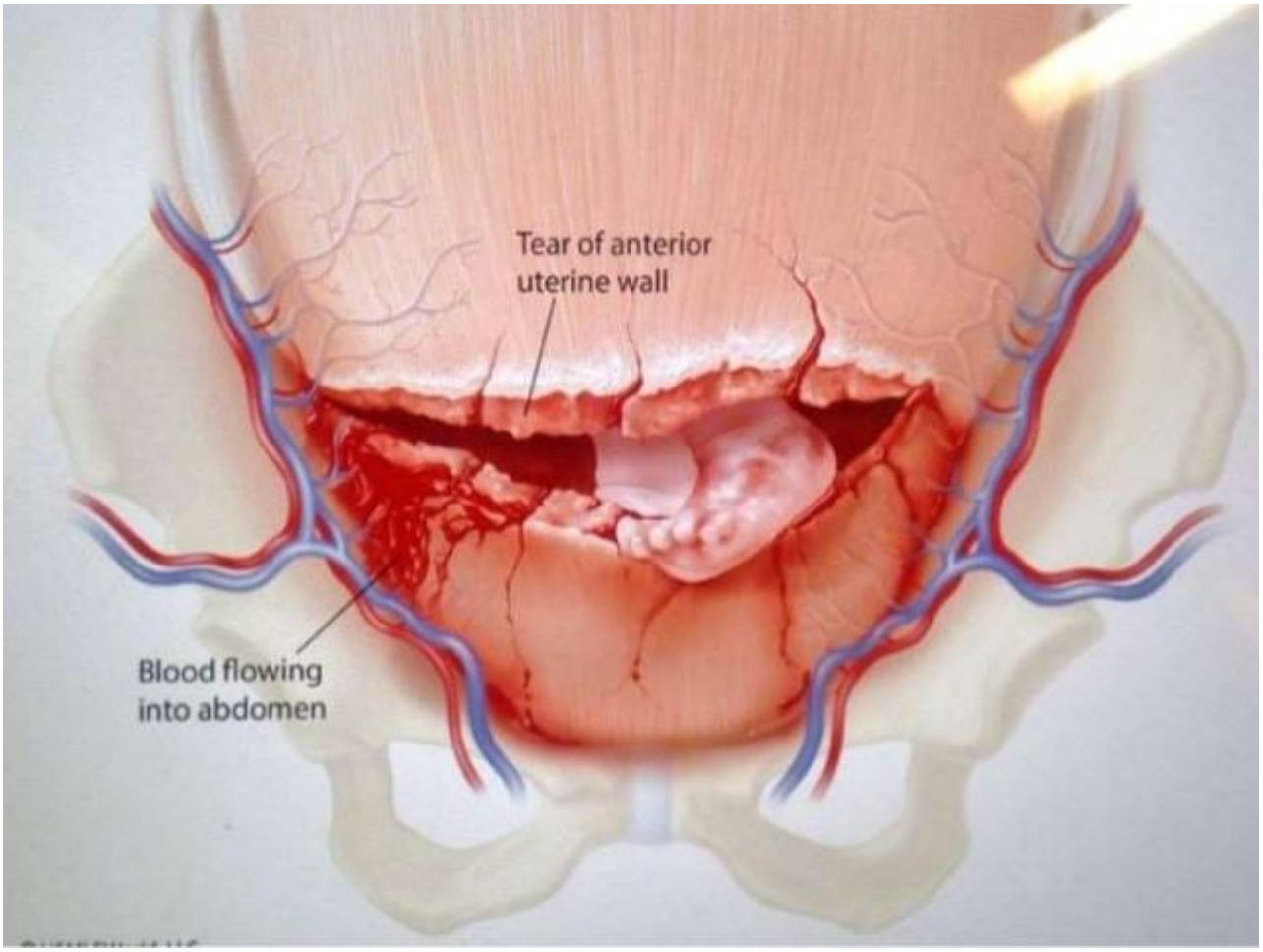
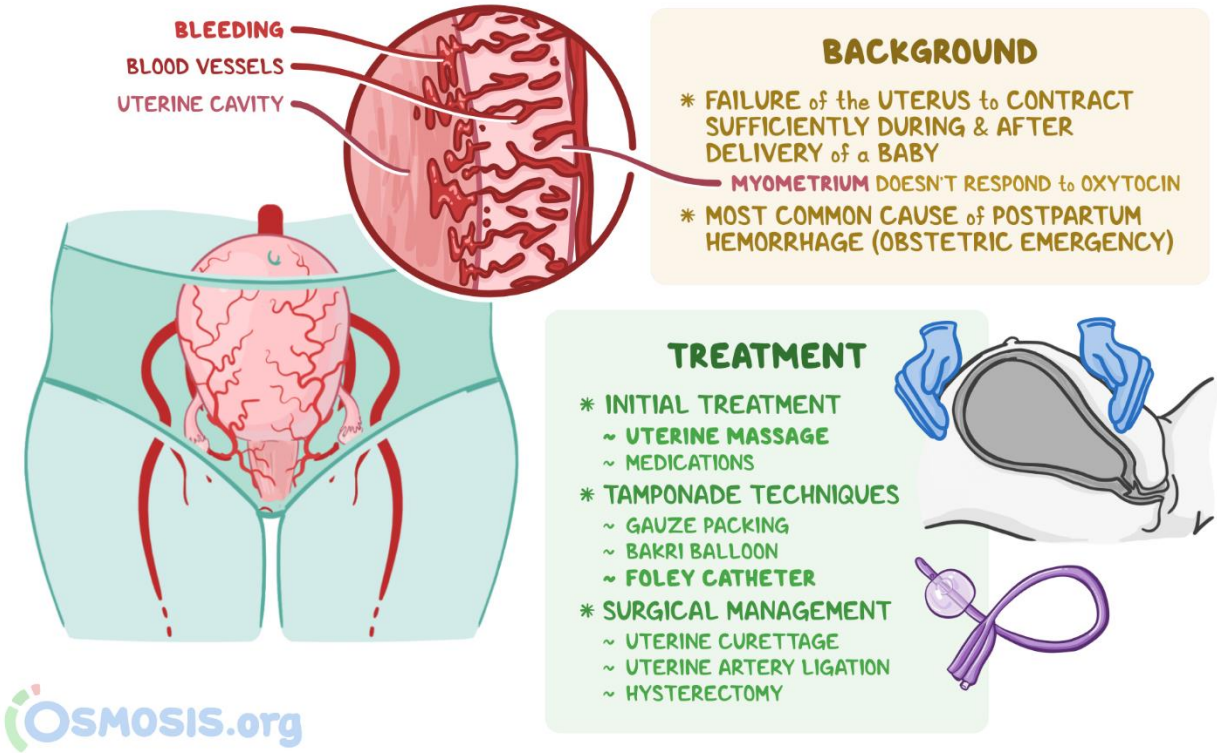




3. Risk Factors

Major risk factors for EPH include:

- Previous cesarean delivery
- Multiparity

- Advanced maternal age
- Placenta previa/accreta
- Prolonged labor
- Infection

The rising global cesarean section rate is strongly linked to increased PAS cases, making it a key contributor to EPH.

4. Pathophysiology

a. Hemorrhage and Shock

Massive blood loss leads to:

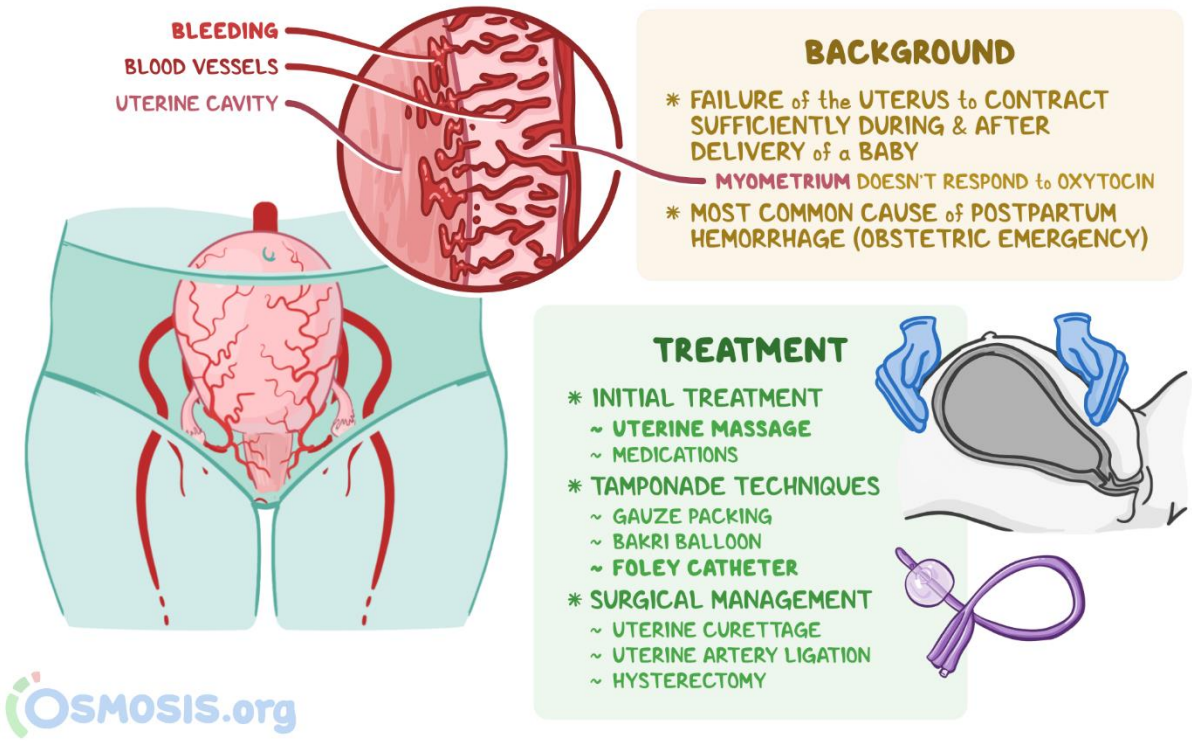
- Hypovolemic shock
- Coagulopathy
- Multi-organ failure

b. Abnormal Placentation

In PAS, trophoblastic invasion extends beyond the normal boundary, preventing proper placental separation.

c. Failure of Uterine Contractility

In uterine atony, the myometrium fails to contract, resulting in uncontrolled bleeding.



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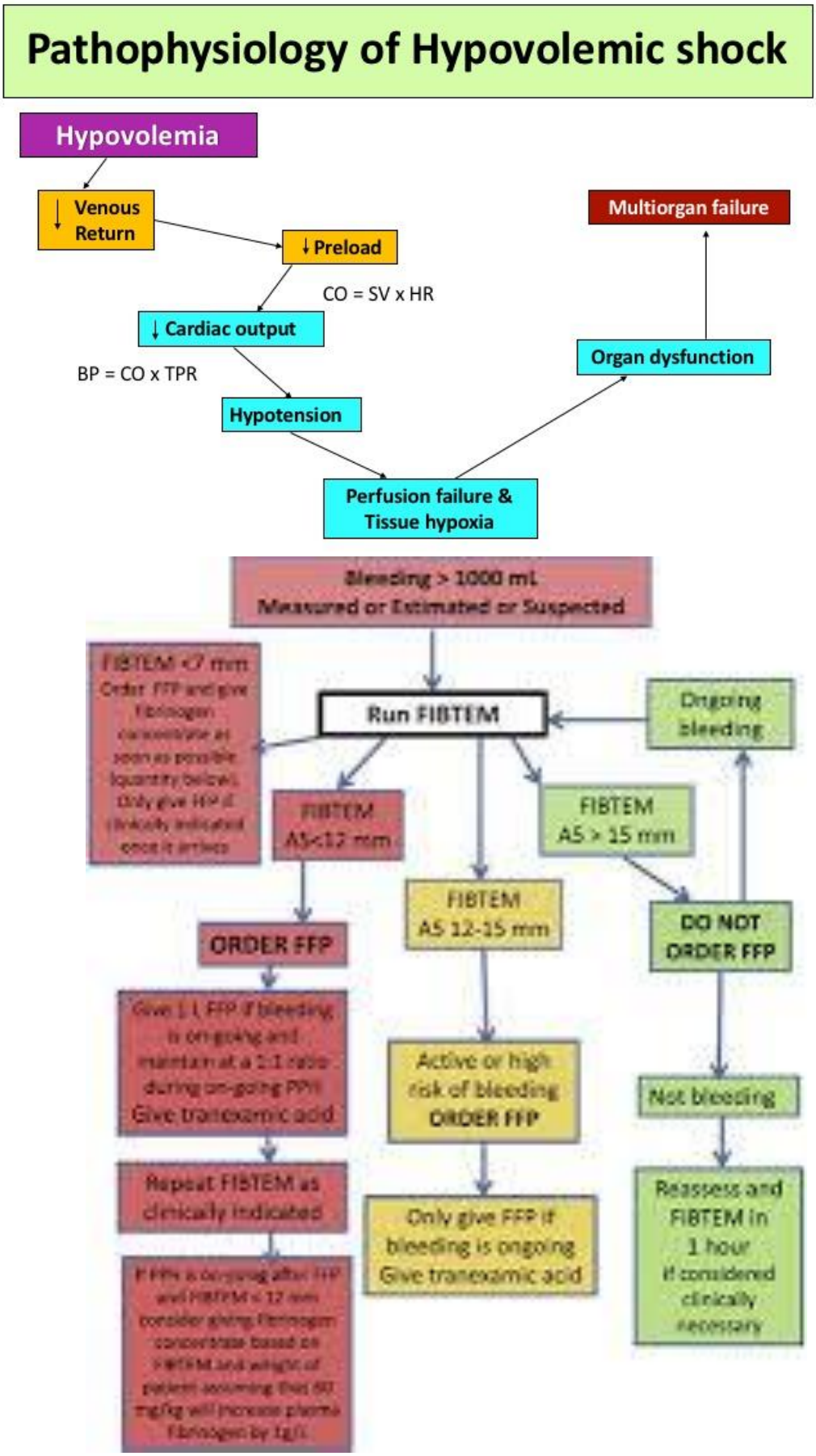

5. Maternal and Fetal Outcomes

Maternal Outcomes

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EPH is associated with significant complications:

- Severe anemia
- Blood transfusion requirement
- Infection (sepsis)
- Injury to adjacent organs (bladder, ureters)

Maternal mortality rates range from 5% to 20% in some settings.

Fetal Outcomes

Adverse fetal outcomes include:

- Preterm birth
- Low birth weight
- Perinatal mortality

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Variables' Order	Pregnancy Outcome	
	PTB	LBW
1	Consumption of iron	Gestational age
2	Abortion history	Consumption of iron
3	Hyperthyroidism	Number of pregnancies
4	Hookah smoking during pregnancy	Father's level of education
5	Hookah smoking before pregnancy	Other complications
6	The number of living children	The number of living children
7	Hypertension	Baby gender
8	Age of father	Mother job
9	Hb in the first prenatal visit	Epilepsy
10	Baby gender	Polyhydramnios

Abbreviations: PTB, preterm birth; LBW, low birth weight; ANN, Artificial neural network; MSE, mean squared error.

6. Management Strategies

a. Conservative Management (First-Line)

Before hysterectomy, several measures are attempted:

- Uterotonics (oxytocin, misoprostol)
- Uterine massage
- Balloon tamponade
- Uterine artery ligation

b. Surgical Intervention

If conservative methods fail:

→ Emergency postpartum hysterectomy is performed

Types:

- Total hysterectomy
- Subtotal hysterectomy

c. Modern Approaches

Recent advancements include:

- Interventional radiology (uterine artery embolization)
- Improved blood transfusion protocols
- Multidisciplinary team management

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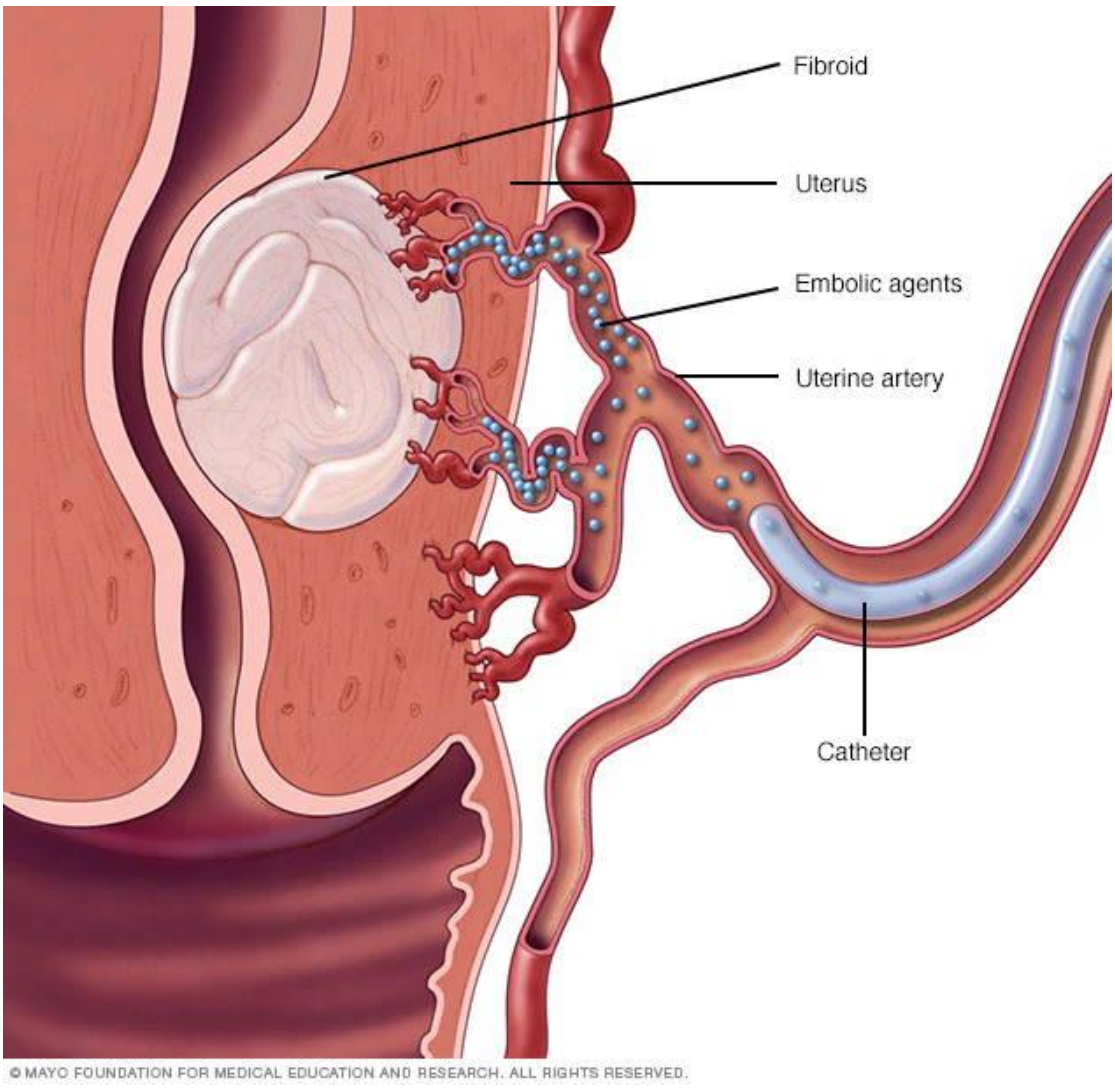

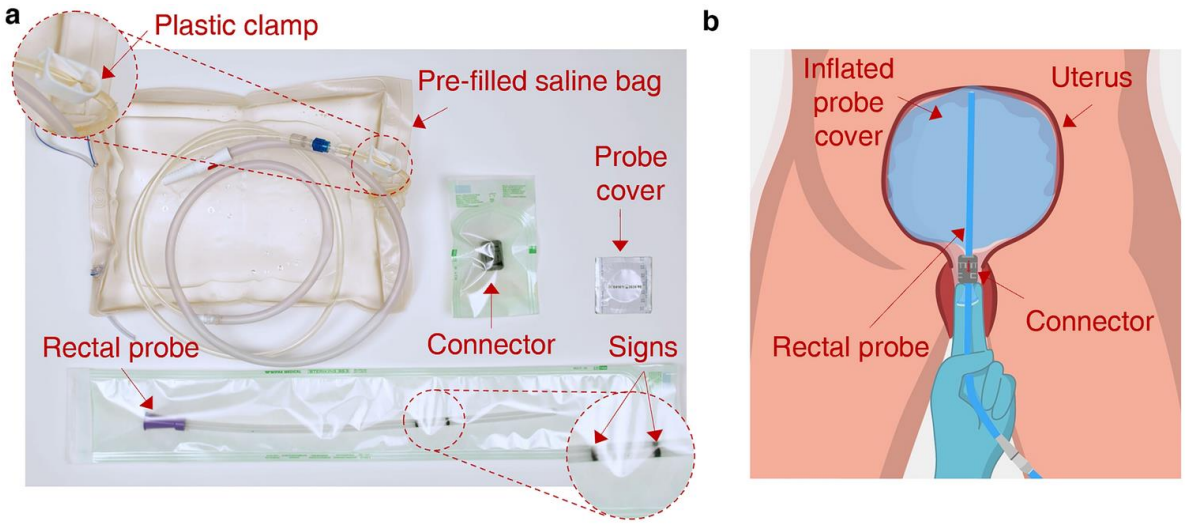

DISCUSSION

Postpartum hysterectomy remains a critical life-saving procedure despite improvements in obstetric care. The shift in indications—from uterine atony to placenta accreta—reflects changes in obstetric practice, particularly the rise in cesarean deliveries.

The procedure carries significant physical and psychological consequences, including permanent loss of fertility. Therefore, prevention strategies are crucial:

- Reducing unnecessary cesarean sections

- Early diagnosis of placental abnormalities
- Improving access to obstetric care

CONCLUSION

Emergency postpartum hysterectomy is a vital intervention in managing severe obstetric hemorrhage. Although its incidence has decreased in developed countries, it remains a significant challenge globally. Advances in early diagnosis, conservative management, and multidisciplinary care are essential to reduce its frequency and improve outcomes.

REFERENCES

1. World Health Organization (2022). *Maternal mortality and hemorrhage report*.
2. Kallianidis AF et al. (2023). Postpartum hysterectomy review.
3. Knight M et al. (2017). UK obstetric surveillance study.
4. Bateman BT et al. (2012). Trends in hysterectomy. *Obstetrics & Gynecology*
5. Shellhaas CS et al. (2009). EPH outcomes.
6. Stanco LM et al. (1993). Emergency hysterectomy.
7. Eller AG et al. (2011). Placenta accreta management
8. Silver RM. (2015). Placenta accreta spectrum
9. Say L et al. (2014). Global maternal mortality
10. FIGO Guidelines (2021). Postpartum hemorrhage management