

# Management of Postpartum Hemorrhage

Module 11

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## Session Objectives:

By the end of the session, participants will be able to:

- Demonstrate bimanual compression of uterus
- Demonstrate external aortic compression
- Demonstrate manual removal of placenta
- Describe WHO's recommendations for management of retained placenta



# Why Do Women Die from Postpartum Hemorrhage?

50% of maternal deaths occur in the first 24 hours after birth, mostly due to PPH.

- **PPH can kill in as little as two hours.**
- **Anemia increases the risk of dying from PPH even earlier.**
- Timely referral and transport to facilities are often not available or affordable.
- Delivery by a competent skilled birth attendant can save many lives.



# What Can Be Done?

Temporary measures to prevent mothers from dying due to PPH if it is not controlled by uterotonics:

- Bimanual compression of the uterus
- External aortic compression
- Manual removal of placenta

**Stabilize the patient and urgently refer!**



# Bimanual Compression of the Uterus

When should bimanual compression be conducted?

If heavy bleeding persists, even *after*:

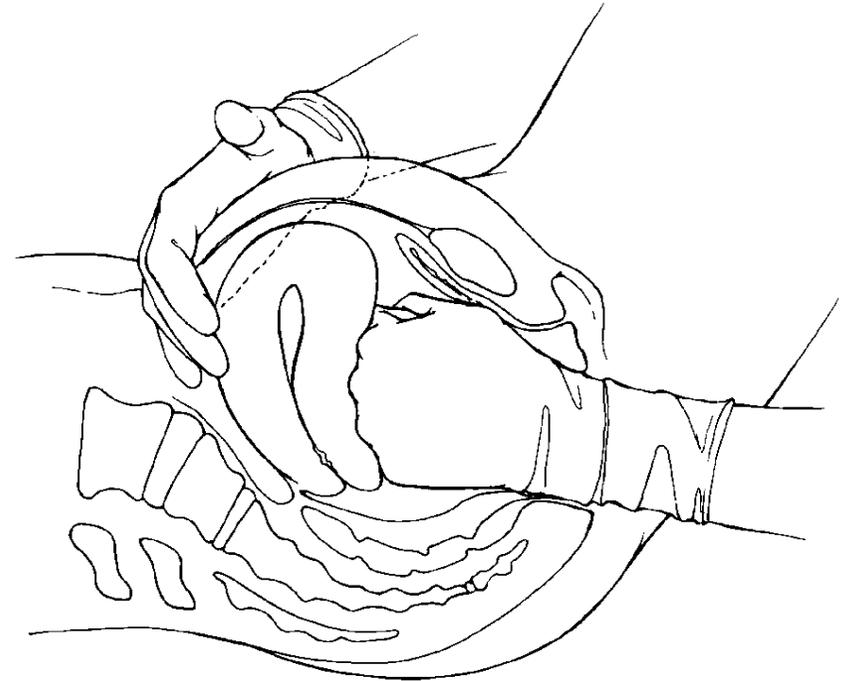
- uterine massage,
- administration of IV uterotonics, and
- removal of placenta,

**conduct bimanual compression of the uterus.**



# Bimanual Compression of the Uterus

- Wearing high-level-disinfected gloves, insert one hand into the vagina; form a fist.
- Place the fist into anterior fornix and apply pressure against the anterior wall of the uterus.
- With the other hand, press deeply into the abdomen, behind the uterus, applying pressure against the posterior wall of the uterus.
- Maintain compression until bleeding is controlled and the uterus contracts.



Source: World Health Organization. *Managing Complications in Pregnancy and Childbirth*, 2000.



# Bimanual Compression of Uterus (cont'd)

## **Key message:**

- The use of bimanual uterine compression is recommended as a temporizing measure until appropriate care is available for the treatment of PPH due to uterine atony after vaginal delivery.
- Stabilize the patient and make arrangements for immediate referral.



# External Aortic Compression

When should external aortic compression be performed?

If heavy bleeding persists, even *after*

- uterine massage,
- administration of IV uterotonics,
- removal of placenta, and
- bimanual compression,

**apply aortic compression and transport the woman to the hospital.**



# External Aortic Compression (cont'd)

- Feel the aortic pulsations through the abdominal wall.
- Apply downward pressure through the abdominal wall with a closed fist placed over the abdominal aorta, just above the umbilicus, slightly toward the patient's left side.
- With the other hand, check the femoral pulsations. If they have not stopped, increase the pressure.
- Maintain compression until bleeding is controlled.



Source: World Health Organization. *Managing Complications In Pregnancy and Childbirth*, 2009.

# Retained Placenta

**Retained placenta is the failure of the placenta to deliver within 30 minutes after delivery of the baby.**

- If the placenta is not expelled spontaneously within 30 minutes of delivery of the baby and there is no excessive bleeding, the use of additional oxytocin (10 IU, IV/IM) in combination with controlled cord traction is recommended.
- If there is no postpartum hemorrhage and the patient is stable, wait for 60 minutes for the placenta to deliver.
- Do not give IV/IM ergometrine or misoprostol because this might cause tetanic uterine contractions, which could delay the expulsion of the placenta.



# Causes of Retained Placenta

- Weak uterine contractions
- Constriction ring; reforming cervix
- Full bladder
- Morbid adherence of the placenta
  - Placenta accreta
  - Placenta increta
  - Placenta percreta
- Uterine abnormality



# Manual Removal of the Placenta

When should manual removal of the placenta be conducted?

- If the placenta fails to deliver within one hour after delivery of the baby, or
- If heavy vaginal bleeding continues despite massage and oxytocin, and placenta cannot be delivered by controlled cord traction, or
- If the placenta is incomplete and bleeding continues,  
**conduct manual removal of the placenta.**



# Manual Removal of the Placenta (cont'd)

In the meantime:

- Encourage the mother to empty her bladder. If this is not possible, empty the bladder via a urinary catheter.
- Encourage the mother to squat or find an alternate position, as this might encourage separation of the placenta.



# Manual Removal of Placenta (cont'd)

## Preparation:

1. Explain to the woman the need for manual removal of the placenta, and obtain her consent.
2. Insert an IV line. If she is bleeding, give her fluids rapidly. If she is not bleeding, give her fluids slowly.
3. Help the woman to turn onto her back.
4. Give her diazepam (10 mg IM/IV).



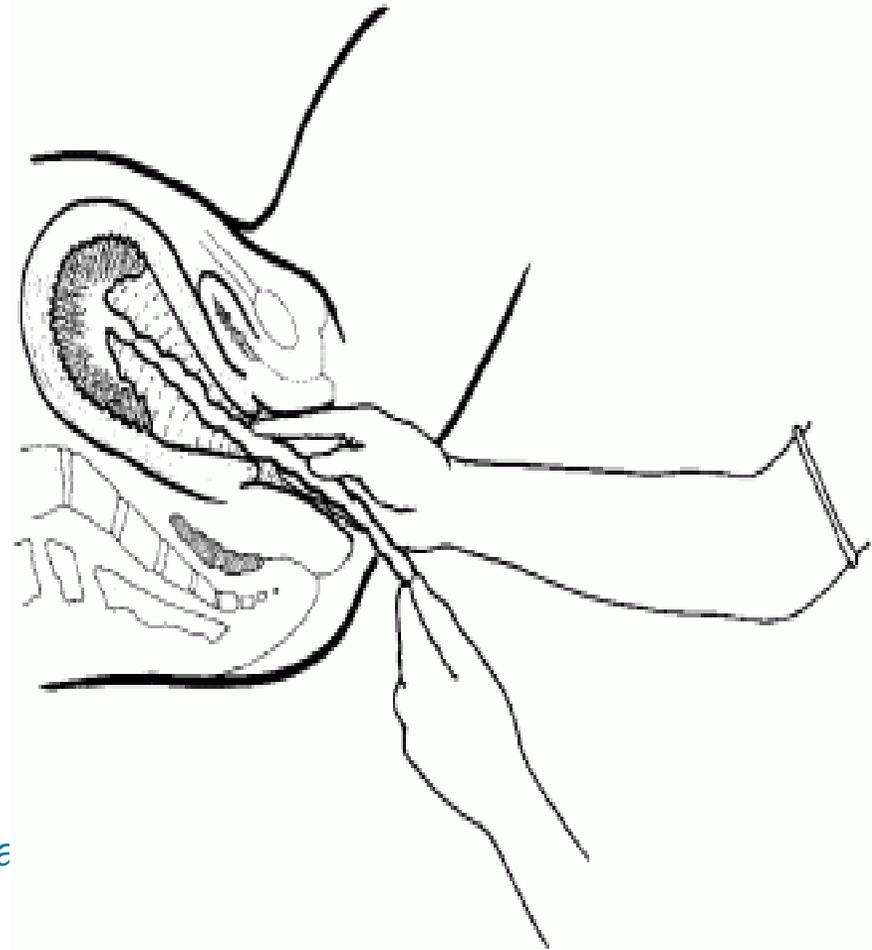
# Manual Removal of Placenta (cont'd)

5. Clean the vulva and perineal area.
6. Ensure that the bladder is empty. Catheterize if necessary.
7. Wash your hands and forearms well and put on long sterile gloves.
8. Give the woman an injection of ampicillin 2 g IV/IM + 500 mg metronidazole (single stat dose).



# Step 1: Locate the Placenta

- Hold the umbilical cord and pull it gently.
- Introduce one hand into the vagina along the cord.
- Locate the edge of the placenta.

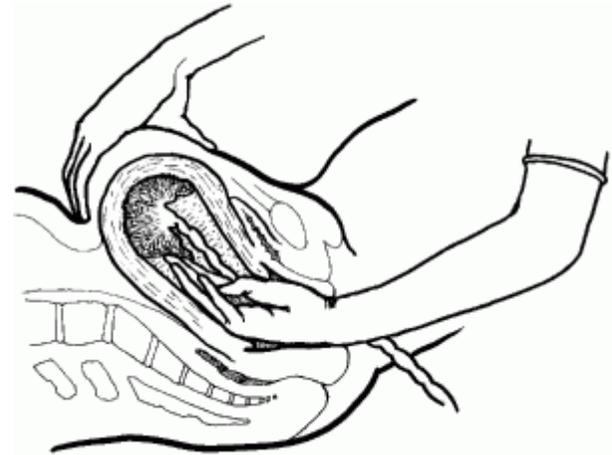


Source: World Health Organization. *Managing Complicated Childbirth*, 2000.



# Step 2: Separate the Placenta

- Move the hand back and forth in a smooth lateral motion until the placenta is detached completely.
- Support the fundus while detaching the placenta.



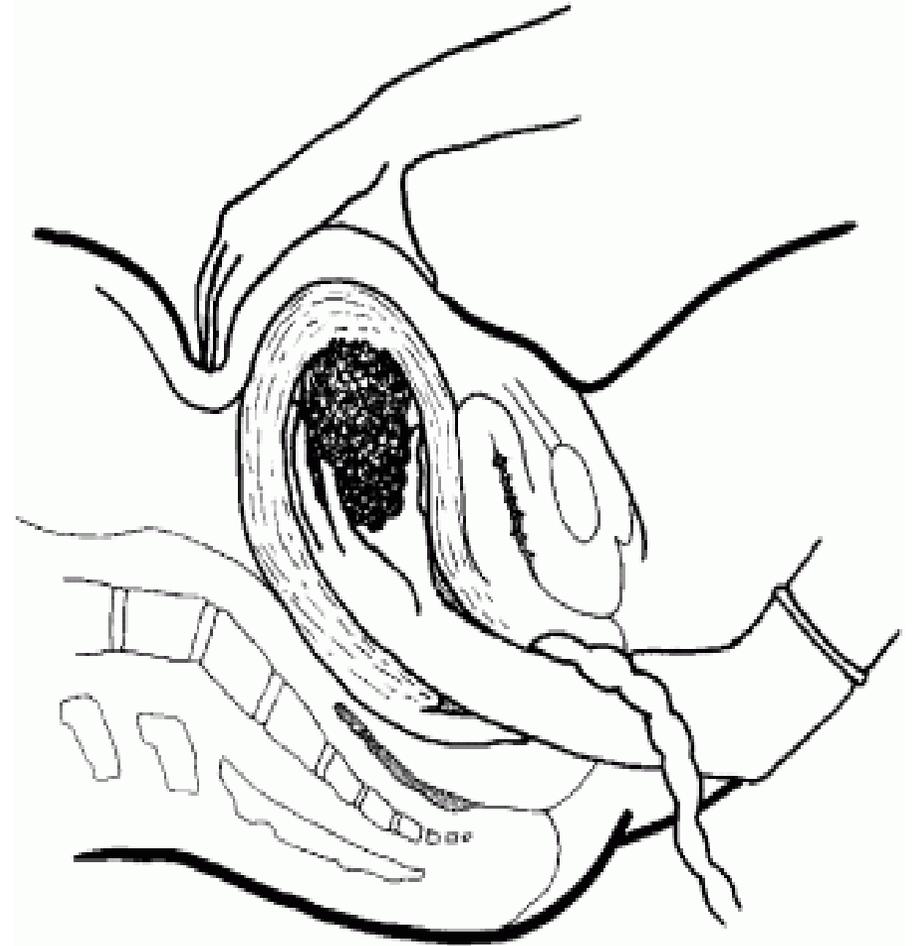
Source: World Health Organization. *Managing Complications in Pregnancy and Childbirth*, 2000.



# Step 3: Remove the Placenta

- Slowly withdraw the hand from the uterus, bringing the placenta with it.
- Continue to provide counter-traction to the fundus by pushing it in the opposite direction of the hand that is being withdrawn.

Source: World Health Organization. *Managing Complications in Pregnancy and Childbirth*, 2000.



# Post-Procedure Care

- Observe the woman closely until the effect of IV sedation has worn off.
- Monitor her vital signs (pulse, blood pressure, respiration) every 30 minutes for the next six hours or until she is stable.
- Palpate the uterine fundus to ensure that the uterus remains contracted.
- Check for excessive lochia.
- Monitor the woman for any signs of infection (fever, chills, uterine tenderness, foul-smelling lochia).
- Continue infusion of IV fluids.



# When Should a Woman Be Referred?

- If days have passed since delivery, or if the placenta is retained due to a constriction ring or a closed cervix, it might not be possible to put the hand into the uterus. Do not persist.

**Refer urgently to a hospital.**

- If the placenta does not separate from the uterine surface after gentle sideways movement of the fingertips at the line of cleavage, suspect placenta accreta. Do not persist in efforts to remove the placenta. **Refer urgently to a hospital.**



Thanks!

