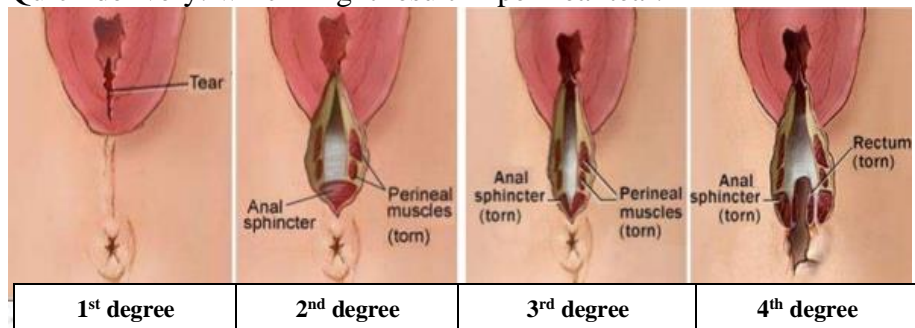


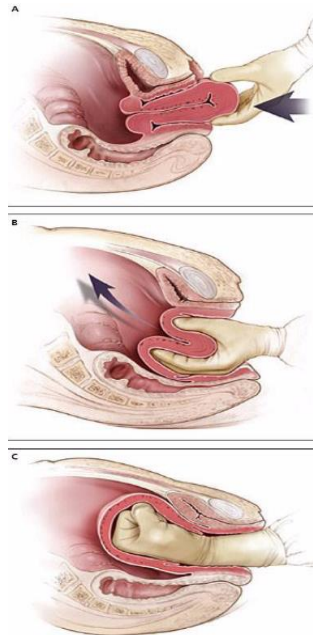


- **80% of pregnant ladies die due to post-partum hemorrhage.**
- **What is the definition of post-partum hemorrhage?**
  - **Blood loss > 500 ml following delivery of the baby.**
  - **Practical definition:** any blood loss after delivery which adversely affects hemodynamic state of the mother (e.g. ↑pulse, ↓blood pressure).
- **Classification of post-partum hemorrhage:**
  - **Primary (occurring within 24 hours after delivery).**
    - ✓ What are the causes of primary post-partum hemorrhage?
      - ❖ Atonic uterus.
      - ❖ Retained placenta/ tissue.
      - ❖ Trauma: lower and upper genital tract.
      - ❖ Coagulopathy.
      - ❖ Uterine over-distention.
      - ❖ Quick delivery: which might result in perineal tear.



✓ How to diagnose primary post-partum hemorrhage?

- ❖ *Vital signs:* ↑pulse, ↓ blood pressure and bleeding is external.
- ❖ *Abdominal palpation:* to check for atonic uterus.
- ❖ *If you do abdominal palpation and you find that uterus is contracted* → you might suspect trauma.
- ❖ *If the uterus is not felt* → inversion.
- ❖ *Non-clotting blood* → indicates the presence of a coagulation problem.



✓ Management of postpartum hemorrhage:

- ❖ *Do massage.*
- ❖ *Catheterize the urinary bladder.*
- ❖ *Inject ergometrine IV or administer misoprostol rectally.*
- ❖ *Start 5% dextrose and prepare blood.*
- ❖ *Inject pethidine IM.*

- Then, examine the expelled products → if the uterus remains flabby → exploration under general anesthesia (see the image) → if it remains flabby → repeat ergometrine with oxytocin drip and cytotec → if all of this fails → internal iliac ligation and hysterectomy.
- If the uterus is hard (traumatic) → exploration and saturating → if this fails → internal iliac ligation and hysterectomy.



- **Secondary (occurring after 24 hours of delivery):**
  - ✓ Case: a patient delivered in the hospital. After 72 hours, breast-feeding was started and she was discharged home. Hemorrhage started as soon as she arrived home thus she went back to emergency. They found that she is pale with ↓blood pressure and tachycardia (140 beats/minute).
    - ❖ *What is your initial management?*
      - Placing her on IV drip.
      - Taking blood to check for Hb, Rh and cross-matching.
      - If there is fever, blood culture will be done. If there is severe hemorrhage with septicemia, the patient will be treated with the following antibiotics: flagyl, ampicillin and gentamicin.
      - You have to check for DIC (fibrinogen, platelets, PT/PTT and D-dimer).
    - ❖ *What could be the possible causes of secondary post-partum hemorrhage?*
      - Retained cotyledons of placenta.
      - Retained membranes.
      - Choriocarcinoma: if you suspect it you must order chest x-ray and β-hCG.