Chapter 21

PRIMARY POSTPARTUM HAEMORRHAGE

Defined as bleeding from the genital tract in excess of 500 ml for vaginal births and 1000 ml with Caesarean births. It is accepted that true blood loss always exceeds the clinical estimate of loss.

AETIOLOGY

TONE

1. Uterine Atony
    - Multiparity
    - Prolonged labour
    - Precipitous labour
    - Anything that over distends the uterus, eg:
        - Polyhydramnios
        - Multiple pregnancy
        - Large baby
    - Induction and augmentation of labour
    - Abruption
    - Ruptured uterus
    - General anaesthesia
    - Full bladder

TRAUMA

2. Lacerations of the genital tract
    - Cervix
    - Vagina
    - Perineum
    - Uterus

TISSUE

3. Retained placenta, uterine inversion

THROMBIN

4. Coagulopathy

Note: History of a previous PPH is a significant risk factor. If risk factors are present, anticipate and prepare for PPH.

Prevention – Active Management of the Third Stage

(For women with risk factors, consideration should be given to extra precautions such as IV access, coagulation studies, crossmatching of blood and anaesthesia backup. This should be discussed antenatally with the patient.)

1. Administer oxytocin (intramuscularly or intravenous infusion **NOT** IV bolus) with birth of baby.

2. Palpate the uterine fundus to ensure uterus is well contracted.

3. With the uterus well contracted, while holding up the fundus of the uterus, exert gentle traction on the cord.

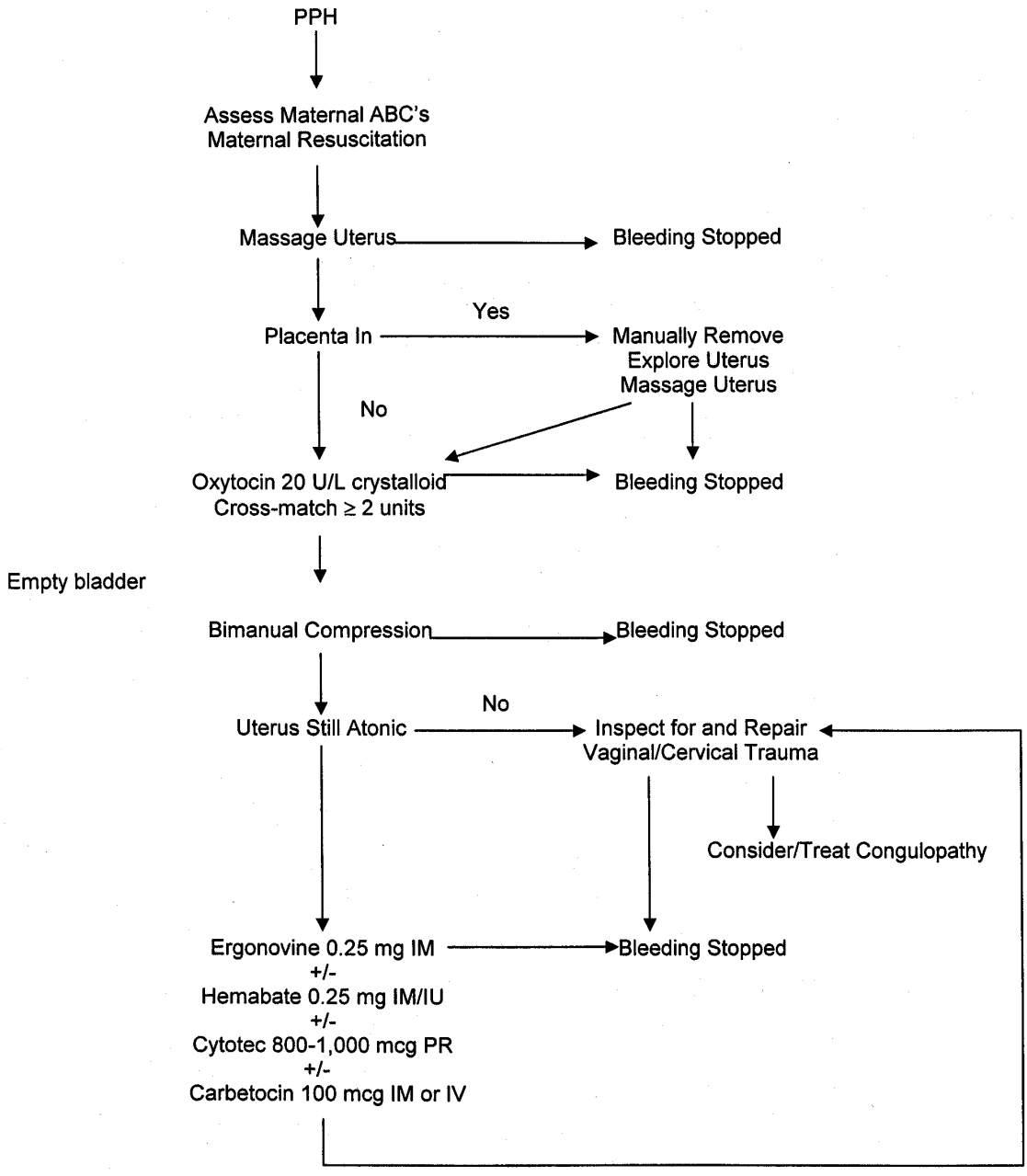
4. If the placenta is retained after 15 minutes, start an oxytocin infusion of 20 units/L of crystalloid at 100-150 ml/hr.

5. After the placenta is delivered, assess the fundus and ensure it is well-contracted. Next, inspect the placenta for completeness after ensuring that there is no ongoing significant uterine bleeding. Note the number of cord vessels.

6. Inspect the cervix, vaginal walls, and perineum for lacerations after expulsion of the placenta.

MANAGEMENT

MANAGEMENT OF POSTPARTUM HAEMORRHAGE



1. Anticipate the patient at risk for postpartum haemorrhage

2. Talk to and observe the woman

3. Get help

4. Empty the uterus of any blood clot, and ensure uterus is not partially inverted
    a) massage the uterus, bimanually compress it if necessary
    b) empty the bladder

5. Commence large bore IV (16 gauge)
    - Oxytocin 20-40 units/L of normal saline wide open initially
    - If bogginess or haemorrhage continues, continue oxytocin and massage the uterus
    - Refer to medications in algorithm

6. a) If the uterus is firm and the bleeding continues:
    - Get help and resuscitate patient
    - Use component blood products, if required
    - Explore the lower genital tract using appropriate analgesia and/or anaesthesia (good lighting and exposure and help is essential to assess for a laceration)
    - Appropriate surgical repair

    b) If bleeding continues and is originating from the uterus:
    - Evaluate for coagulopathy
        i. If abnormal, correct with component blood products, eg:
            - FFP
            - Cryoprecipitate
            - Platelets
            - RBC's
    - Prepare for OR
        i. Rule out uterine rupture or inadequate repair
        ii. Be prepared to suture ligate the uterine/hypogastric arteries , embolize the uterine arteries, or perform a hysterectomy.

7. Patients who cannot be given blood require careful pre-labour assessment and transfer to the centre most equipped to deal with a PPH should it occur. While respecting the woman's desire for no blood products to be

given, the clinician must employ all other treatment options for PPH to the fullest.

References

1. Society of Obstetricians and Gynaecologists of Canada (SOGC), **Advances in Labour and Risk Management Course (ALARM)**, 13th ed., 2005.

2. *Prevention and Management of Postpartum Haemorrhage*, SOGC Clinical Practice Guidelines, No. 88, April 2000.