11.0 STIMULATION OF LABOUR AND MYOMETRIAL RELAXATION

- Myometrial stimulants should be used with great care before delivery especially in porous women.
- Use in obstructed labour should be avoided.
- Oxytocics are indicated for:
  - augmentation of labour
  - Induction of labour
  - Active management of third stage of labour.
  - Uterine stimulation after delivery

11.1 Labour Induction

For induction of labour use: Oxytocin IV the dose will depend on parity.

- Primigravida:
  - **A**: Oxytocin IV 5 IU in 500mls of fluid titrate at 15, 30, 60 drops per minute until desired uterine contractions are attained.

- Multiparous:
  - **A**: Oxytocin IV Starts with low dose eg 1.25 IU in 500mls of fluid titrate as above. Regulate the dose according to response.

If no progress of labour is achieved give;

- **A**: Oxytocin (IV) Initially 1 unit then 4 units in 1 litre Normal Saline at 15, 30, 60 drops per minute until regular contractions lasting for more than 40 seconds are maintained.

When 4 units are not enough to cause maintained contractions, and it is first pregnancy, the dose can be increased to 16, 32 then 64 units in litre of Normal Saline each time increasing the delivery rate through 15, 30 and 60 dpm.

11.2 Augmentation of Labour

If labour progress is not optimum labour augmentation is necessary. Can be achieved by:

- **A**: Oxytocin as above
- **OR**
  - Artificial rupture of membranes and Oxytocin

  - If the membranes already ruptured and no labour progressing, the steps above should be followed.
  - Obstructed labour could be the cause of labour failure.

Note: Rule out obstruction before augmenting labour with oxytocin.

11.3 Myometrial Stimulation after Delivery

**Post partum hemorrhage (PPH)**

It is an excessive bleeding of more than 500ml after the third stage of labour and a major cause of maternal morbidity and mortality.

Major causes are:

- Uterine atony
- Tears of the vagina/vulva
- Retained products of conception
- Rarely rupture of the uterus
- Bleeding disorder (e.g. coagulopathies, DIC)

**Management**
In order to prevent the occurrence of this condition, active management of the third stage of labour (ATMSL) is mandatory. This involves the injection of an oxytocic after the delivery of the foetus followed by controlled cord traction and uterine massage.

**Treatment**
**Drugs of Choice:**

A: Oxytocin (I.M) 10 I.U.

OR

A: Ergometrine (I.M) 0.25 – 0.5 mg

OR

A: Misoprostol 800 -1000 microgram (mcg) orally/rectally

Give Oxytocin (I.M) 5 units after delivery of the infant; when no response gives Oxytocin (I.V infusion) 10-20 units in 1 litre of NS running at 10-20 drops per minute (dpm)

**Second Choice: Ergometrine (IM)** 0.5 mg after delivery of the infant, in the absence of myometrial contraction and to prevent postpartum hemorrhage

**Note:** Use Ergometrine cautiously in hypertensive heart disease patients.