

Management of oxytocin infusion

Pitocin (oxytocin injection):-

- It is a sterile, clear, colorless aqueous solution of synthetic oxytocin, for intravenous infusion or intramuscular injection.

❑ Action :

1. Oxytocin stimulates contractions of the smooth muscle tissue in the wall of the uterus during labor .
2. After delivery to stimulate the secretion of breast milk.

□ Objective:

1. Induction of labor.
2. Strengthen labor
3. contractions during childbirth
4. Induce an abortion
5. Control bleeding after childbirth.

□ Equipment:

PREPARE THE NECESSARY EQUIPMENT

- IV Solution 1000mL Ringers Lactate or glucose 5%.



- Oxytocin ampules.



- Tocolytic agent such as terbutalin (anti dote for oxytocin)

- Electronic fetal monitor.



- Infusion pump

PREPARE THE NECESSARY EQUIPMENT

- **IV tray / IV equipment:**

- *Patent iv site.*

- *Syringe.*

- *Cannula*

- *Cotton with alcohol.*

- *Adhesive tab.*



- **Intake and output chart**



1. Hand washing
2. Prepare the necessary equipment and take it into the bed side table.
3. Explain the procedure to the mother.
4. Review woman chart to identify does of oxytocin route of administration

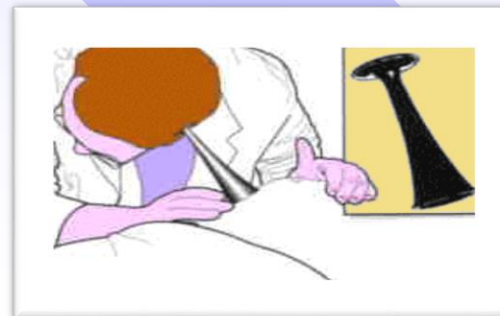
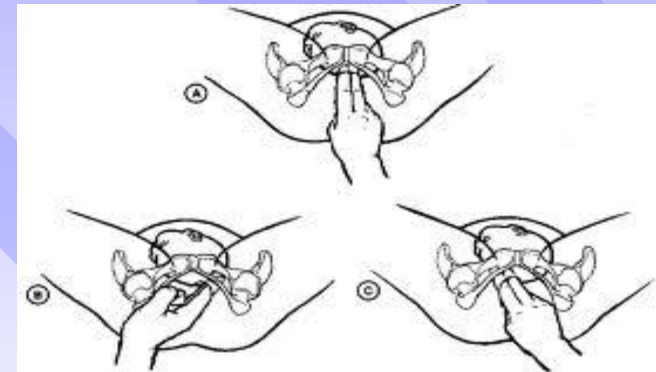
5. Assess the woman to be free from any risk factors

(contraindications) as:

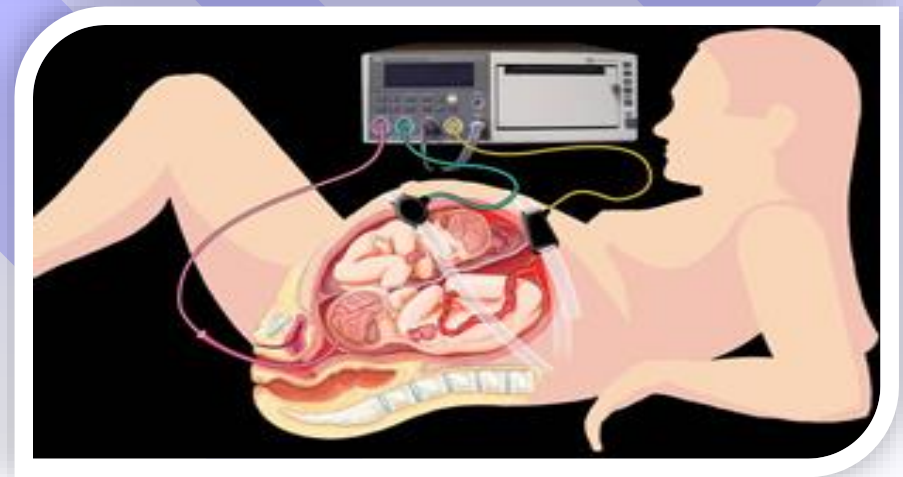
- Cephalopelvic disproportion
- Placenta previa
- Over distention of uterus
- Non- reassuring FHR .
- Bleeding

6. Check the woman's:

- Vital signs
- Position of fetus
- Uterine contraction
- Cervical dilatation
- fetal heart sounds before starting the infusion .



7. Connect the woman with fetal monitor to assess fetal wellbeing & to establish a baseline for uterine activity
8. Ensure that the woman is on her left side.



9. Prepare the I.V. fluids:

- **Dilute the ampoule of oxytocin (10. IU) with 10 cm of ringer lactate or dextrose 5%. So, each cm of diluted solution contains 1 IU oxytocin.**
- **Insert 5 cm of the prepared dose of oxytocin in the 500 cc I.V. fluid bottle.**
- **Put label of oxytocin dose, route, time and rate.**

10. Start oxytocin infusion according to hospital protocol or physician's written orders:

- The initial dose of oxytocin is usually 0.5 to 1.0 IU /minute at a rate of 10 drops / minutes.

11. Increase the dosage of oxytocin gradually by 1 to 2 mu/min and increase the infusion rate by 10 drops per minute every 30 minutes until a good contraction pattern is established .

12. Assess and record the woman's blood pressure, uterine contractions and the fetal heart rate before each increase in oxytocin dosage and rate .

13. Assess signs and symptoms of oxytocin toxicity (Uterine hyperstimulation and None reassuring fetal heart rate patterns).

14. If toxicity occurs apply the following measures:

- Discontinue the oxytocin infusion
- Notify a physician.
- Positioning the woman on her left side.
- O2 by mask as ordered.
- Increasing the plan intravenous fluid rate.
- Prepare a Tocolytic agent such as terbutalin to be ready.

POST PROCEDURE TASKS

- Record intake and output.
- Remove the equipments.
- Wash hand.
- Complete the partogram data.
- Let the oxytocin infusion to be completed after delivery with close observation of any signs of postpartum hemorrhage until the dose that is finished.

