

• **Oxytocin for Labor**

CONTENTS:

- I. Assessment
- II. Procedure
- III. Indications for interventions and notification to MD/CNM
- IV. Restarting oxytocin

PURPOSE: To outline safe and effective nursing management of the woman receiving IV Oxytocin for the induction or augmentation of labor.

POLICY STATEMENTS:

1. Indication for Oxytocin is to induce or augment labor. Elective inductions must be at least 39 and 0/7 weeks of gestation or have documented fetal lung maturity.
2. Oxytocin infusion should be titrated to achieve signs of adequate uterine activity. Signs of adequate uterine activity that may warrant a hold at the current oxytocin rate can consist of one or more of the following:
 - Cervical change
 - Regular uterine contractions every 2-3 minutes
 - Adequate contraction intensity (strong by palpation or >200 Montevideo units as assessed by intrauterine pressure catheter.)
3. Oxytocin for induction of labor shall not be used (is contraindicated) in the following conditions:
 - Evidence of mechanical obstruction to birth, such as Cephalopelvic disproportion, or placental previa,
 - Hypertonic uterine activity,
 - Vasa previa,
 - Abruptio (relative contraindication),
 - Uterine scar extending into the upper uterine segment including a classic incision,
 - Active herpes.
4. Relative contraindication is previous cesarean section.

Steps	Outcome & Key Points
<p>I. Assessment / Reassessment:</p> <ol style="list-style-type: none"> 1. Review and record patient history for indications or contradictions to therapy 2. Obtain baseline HR, RR, BP and Temperature 3. Initiate electronic fetal monitoring (EFM) and obtain 10-15 minutes baseline noting range and variability. 4. Ensure IV access (18 gauge), piggyback at lowest port. 5. Monitor I&O 	<p>NICHD terminology is used and documented on the FLOW sheet</p>
<p>II. Procedure:</p> <ol style="list-style-type: none"> 1. Initiate oxytocin infusion via an infusion pump: <ol style="list-style-type: none"> a. Induction of Labor – initiate at 2 milliunits/ min (or at 1 milliunit/ min. if ordered by MD/ LIP). Dosage may be increased every 15 minutes for the first two hours, then every 30 minutes thereafter to the recommended maximum dosage of 20 milliunits/ min. Any higher dosage of up to a maximum of 30 milliunits/ min requires an additional MD/LIP order. b. Augmentation of Labor – initiate at 2 milliunits/ min (or 	

The order in SCM will specify the indication for Oxytocin, either induction or augmentation. (Two separate order sets in SCM)

(Note: The **only time** incremental increases of 15 min. may be used is at the initial onset of the induction)

at 1 milliunit/ min. if ordered by MD/LIP). Dosage may be increased every 30 min. to the recommended maximum dosage of 20 milliunits/ min. Any higher dosage of up to a maximum of 30 milliunits/ min requires an additional MD/LIP order.

c. **Titration of Dosage:** Incremental changes in the dosage (within the time frames specified above) and based on the patient’s situation, background and nursing assessments include:

	↑ by 2 milliunits/min.	↑ or ↓ by 1 milliunit/min.	Stop Oxytocin & notify MD/ LIP
Fetal Status	FHR baseline and variability are WNL as outlined by NICHD guidelines, with no late decelerations, recurrent, or prolonged decelerations present		Evidence of deteriorating fetal status per NICHD guidelines. Initiate intrauterine resuscitative measures per AWHONN/ ACOG guidelines.
Contraction Status	Contractions palpate to moderate intensity or less; are regular and occurring no closer than every 2 -3 minutes apart; and are less than 60 seconds in duration	When contraction frequency, intensity and/ or duration have shown a pattern of rapid response to dosage increases, it is reasonable to titrate the dosage down by 1 milliunit/ min. or increase more slowly by 1 milliunit/ min. to prevent tachysystole..	Tachysystole (> 5 contractions in 10 minutes, averaged over a 30 minute window) Contractions lasting longer than 60 seconds in duration or occurring more frequently than 2 minutes apart, for more than 50% of contractions over 20 min.
Maternal Coping Status	Mother is coping well with labor as evidenced by VS within normal limits and verbalization of comfort/ pain level	When the mother expresses anxiety about the rapid increase in contraction intensity or frequency, is recovering from a procedure, or is overly fatigued; the decision to ↓ the current dosage or ↑ the dosage more gradually will allow the woman to ‘rest’ so that she can cope with her labor.	Provide comfort measures; determine the need for pain therapy (medications, epidural) if mother unable to cope; notify MD/LIP

2. a. While oxytocin is being administered, either increased | Asses and record FHR, uterine

- or maintained at a specific dose, maintain continuous electronic fetal monitoring.
- b. Record fetal, uterine and maternal response to therapy before increasing dose.
- c. Continuous EFM must be continued during the placement of an epidural.
- 3. Offer clear liquids until the active phase of labor begins then offer ice chips only.
- 4. Monitor and record vital signs including pain level every 2 hours.
- 5. Encourage ad lib and OOB activity within the constraints of the IV pump and EFM.

contraction pattern and intensity every 15 minutes.

While administering oxytocin, monitor and assess for tachysystole of the uterus.

See **CPM for Epidural Anesthesia in Labor.**

Maintain I&O throughout oxytocin administration. Mainline IV per orders. If oxytocin is administered > 24 hours monitor for signs of water intoxication. Signs and symptoms of water intoxication include hyponatremia, nausea, vomiting, lethargy, altered mental status, loss of consciousness, and seizures.

Increase frequency of vital signs for appropriate phase of labor. See **CPM for Labor.**

Encourage frequent position changes
Provide active labor support that is compatible with the patients' birth plan and needs.

III. Indications for interventions and notification to MD/CNM:

- 1. With abnormal fetal heart rate, or vaginal bleeding or prolapsed cord:
 - a. Initiate intrauterine resuscitative measures. See **CPM for Fetal Heart Monitoring**
 - b. Stop Oxytocin infusion
 - c. Prepare for birth
 - d. Continue fetal monitoring
 - e. Provide support for the patient and family
- 2. When tachysystole or tetanic contractions (lasting more than 2 minutes):
 - a. Stop Oxytocin infusion
 - b. Increase IV fluid rate to 200 ml/hr as ordered by MD/LIP
 - c. Continue fetal monitoring
 - d. Turn patient onto left or right lateral position
 - e. Start oxygen at 10 liters/minute
 - * f. Give terbutaline 0.25 mg – 0.5 mg subcutaneous per MD/LIP order.

Steps

Outcome & Key Points

IV. Restarting oxytocin

1. After tachysystole or a tetanic contraction or other maternal/ fetal indication:

- a. Wait at least **15 minutes** before restarting oxytocin.
- b. May restart once the fetal heart rate / uterine contraction pattern has recovered and returned to a stable pattern. If the Oxytocin has been discontinued for < 30 min., Oxytocin must be restarted at half the dose rate for every 10 minute increment since discontinuation of medication. If the Oxytocin has been discontinued for ≥30 min., re-start at the initial dose ordered. (Note: the initial start dose is the minimum dosage in either case.)

Document fetal, contraction and maternal coping status prior to restarting oxytocin.

For calculations:

- Between 10 – 19 minutes since discontinuation: ½ last dose
- Between 20 – 29 minutes since discontinuation: ¼ last dose
- 30 min. and above since discontinuation: initial start dose.
- (Note: Fractional dosages should be rounded up; e.g., a re-start dose calculated @ 3.5 milliunits/ min. would be rounded up to 4 milliunits/ min.)

2. After placement of an epidural:

- a. If the oxytocin is stopped during the placement of the epidural, wait at least 15 minutes from the completed insertion of the epidural before restarting oxytocin.

See **CPM for Epidural Anesthesia in Labor.**

DATES:

- **Effective:** 5/09
- **Original:** 4/96
- **Reviewed:** 7/02, 3/03, 9/03, 4/05, 10/08, 1/09, 5/09
- **Revised:** 4/05, 10/08, 1/09, 5/09

oxytocin04.doc

