Oxytocin Challenge/Contraction Stress Test:

Policy Title/Number:  Oxytocin Challenge/Contraction Stress Test

Manual: Labor and Delivery Clinical Policy Manual

Categories:

Contributors: Bennett Spetalnick MD, Maureen Malee PhD, MD, Beverly Scruggs RN, and Donna Ruth RN

Review Responsibility: Obstetric Patient Care Committee

Effective Date: April 2005

Last Revised Date: June 2007

Team Members Performing:

_X_ RN

____ LPN

____ Care Partner/Patient Care Technician

____ Other licensed staff (specify):

____ Other non-licensed staff (specify):

Guidelines Applicable to:

____ VUH

____ VMG*

____ VCH

____ PHV

_X_ Other (specify): Labor and Delivery

____ Exceptions (specify):

Guidelines Applicable to:

____ All patient care areas

____ All inpatient areas

____ Adult areas only

____ Pediatric areas only

____ Critical Care/Stepdown areas only

_X_ Selected areas (specify): Labor and Delivery

____ Exceptions (Specify):

Specific Education Requirements:  Yes  No

Completion of Labor and Delivery unit orientation.

Physician/CNM Order Requirements:  Yes  No
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Oxytocin Challenge/Contraction Stress Test

I. **Purpose:** To assess the fetal heart rate response to contractions. The results of the test may be used to aid the decision making process regarding mode and timing of delivery.

II. **Indications:**

   This may include, patients with high risk pregnancies (presence of disease state in mother or fetus) or previous testing that may have indicated compromised fetal status.

   **Relative Contraindications:**
   1. Preterm labor patients or certain patients at risk for preterm labor.
   2. Preterm rupture of membranes.
   3. Patients with known placenta previa
   4. Patients with previous classical cesarean section incisions or with history of extensive uterine surgery.

III. **Procedure:**

   a. Patient is admitted to Labor and Delivery for an Oxytocin Challenge/Contraction Stress test.
   b. Initial Vital Signs are assessed and the external monitor is applied. A continuous FHR tracing must be maintained for the duration of the test. The patient should rest in the lateral recumbent or Semi-Fowler’s position. (Avoid the supine position).
   c. An OR suite should be available during testing should the patient require an immediate Cesarean section delivery
   d. The external monitor tracing should be assessed prior to the administration of Oxytocin.
   e. Fetal heart rate baseline and current level of uterine activity must be established prior to the initiation of the Oxytocin infusion.
   f. If current uterine activity consists of three contractions of at least forty seconds duration occurring within a ten minute period, the fetal heart rate response to these contractions will be evaluated. The administration of Oxytocin is not necessary and the test is complete.
   g. If the level of uterine activity does not meet the above criteria Oxytocin will be given to stimulate or increase uterine contractions.
   h. IV access will be obtained and a mainline infusion begun.
   i. The Oxytocin is always given as a piggyback infusion. The line with the Oxytocin should be connected to the mainline at the most proximal port to the IV insertion site. The Oxytocin infusion will always be regulated by using an infusion pump.
   j. The Oxytocin infusion for the OCT will begin at 0.5 mU/min and the infusion rate may be doubled every 20 minutes until uterine activity begins.
   k. Once uterine activity is established smaller increments for Oxytocin increases may be used until adequate uterine activity is achieved. Adequate uterine activity is
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defined, for the purpose of this test, as 3 contractions of at least 40 seconds duration within a 10 minute window.

l. Smaller increases may decrease the risk of uterine hyperstimulation
m. If the Oxytocin infusion is at a rate of 16 mU/min and uterine activity has not been established notify the provider.

n. At a dose of 16mU/min the incremental increasing of Oxytocin will decrease to 0.5-1.0 mU/min every 15 minutes.

IV. Interpretation
Interpretation is based on the presence or absence of late decelerations, defined as decelerations that start after the nadir of the contraction and persist beyond the end of the contraction:
The OCT will be interpreted using the following criteria:

NEGATIVE: no late or significant variable decelerations

POSITIVE: late decelerations following 50% or more of contractions (even if contractions are fewer than three in 10 minute window).

EQUIVOCAL- SUSPICIOUS: intermittent late decelerations or significant variable decelerations.

EQUIVOCAL- HYPERSTIMULATORY :fetal heart rate decelerations that occur in the presence of contraction more frequent than every two minutes or contractions that last longer than 90 seconds.

UNSATISFACTORY: fewer than three contractions in 10 minute window or an uninterpretable tracing (quality of the tracing renders interpretation impossible).

V. References:


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Contributors:
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Endorsement:
Obstetric Practice Committee, May 2007
Labor and Delivery Standards Committee– April 2005

Approval:

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