**Contraction Stress Test**

**PROCEDURE**

**Labour and Delivery Manual**

| Original Date          | MCH – June 1993
|                       | GNH – June 1997
| **Revised Date**       | March 2007
|                       | June 2011
|                       | July 2015
| **Approved by:**       | Senior Director of Operations, Women’s & Child Health, GNCH/MCH
| **Next Review**         | July 2018

**Purpose**: To evaluate the response of the fetal heart rate to a reduction of blood flow in the intervillous space during an induced contraction.

**Indications**: Uteroplacental Pathology (ie. Diabetes; Hypertension; Intrauterine Growth Restriction or Post-Dates).

**Contraindications**: Patients at high risk for premature labour, prelabour rupture of membranes, multiple gestation, cervical incompetence, or conditions where vaginal delivery is contraindicated (ie. placenta previa, previous classical incision).

**Physician Responsibilities**: Only an obstetrician may order the test. The physician ordering the Contraction Stress Test should be in the facility as the Contraction Stress Test is conducted if the tracing is atypical or abnormal and the BPP is less than 5 out of 8.

**Procedure**

1. The objective is to stimulate three contractions in 10 minutes lasting sixty seconds using IV oxytocin.

2. Completed on the Labour and Delivery unit.

3. Check physician’s order.

4. Perform Non-Stress Test. If atypical or abnormal, consult with physician prior to testing.

5. Position patient in semi-fowler’s position or left lateral position.

6. Prepare oxytocin 20 units in 1000 ml Ringer’s Lactate, Normal Saline or 2/3–1/3.

7. Start oxytocin at 1 milliunit per minute and increase by 1 milliunit every 30 minutes until test criteria are achieved.
Interpretation of the Contraction Stress Test

**TEST CRITERIA – 3 contractions in 10 minutes lasting 60 seconds**

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<thead>
<tr>
<th><strong>Negative Test</strong></th>
<th>With uterine contractions that meet test criteria, no late decelerations are seen.</th>
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<tbody>
<tr>
<td><strong>Positive Test</strong></td>
<td>Late decelerations occur in more than 50% of contractions even when the test criterion of contraction pattern has not been met.</td>
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<tr>
<td><strong>Equivocal Test</strong></td>
<td>With uterine contractions that meet test criteria, with repetitive decelerations that are not late in timing or pattern.</td>
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<tr>
<td><strong>Unsatisfactory Test</strong></td>
<td>Contraction pattern criteria are not achieved or the quality if the tracing is inadequate for interpretation.</td>
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**NOTE:** If atypical or abnormal fetal heart rate patterns are noted, follow Fetal Health Surveillance Guidelines.

**References**

