Oxytocin Protocol

**EPIC Order set to read:**
1. Oxytocin 30 units in 0.9% NaCl 500 ml peripheral line, IV infusion continuous.
2. Start at 2 milli-units/min.
3. Increase by 2 milli-units/min.
4. Titrate every 30 minutes until contractions are regular at 2-3 minute intervals.
5. Do not exceed 16 milliunits/min without physician evaluation of contractions and FHR tracing.

**Criteria for the diagnosis of inadequate uterine activity**¹,³
- A contraction pattern demonstrating less than 200-250 Montevideo units (MVU) in the presence of inadequate labor process.
  OR
- A contraction pattern with less than a contraction every 2-3 minutes, lasting less than 80-90 seconds, and not palpating as “strong” to an experienced labor nurse.

**Criteria for labor augmentation**
- FHR tracing that is either Category I or II (normal or indeterminate).²
- Inadequate uterine contractions as defined above.
- Prolonged latent phase defined as ≥ 20 hours nulliparous or ≥14 multiparous.⁴
- Protracted active phase as defined as rates of cervical change slower than those noted in Table 1.⁵
- Protracted second stage is defined as a duration greater than those noted in Table 2.⁵

**TABLE 1**⁵
<table>
<thead>
<tr>
<th>Cervical Dilation (cm)</th>
<th>Parity 0</th>
<th>Parity 1</th>
<th>Parity 2+</th>
</tr>
</thead>
<tbody>
<tr>
<td>3-4</td>
<td>1.8 (8.1)</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>4-5</td>
<td>1.3 (6.4)</td>
<td>1.4 (7.3)</td>
<td>1.4 (7.0)</td>
</tr>
<tr>
<td>5-6</td>
<td>0.8 (3.2)</td>
<td>0.8 (3.4)</td>
<td>0.8 (3.4)</td>
</tr>
<tr>
<td>6-7</td>
<td>0.6 (2.2)</td>
<td>0.5 (1.9)</td>
<td>0.5 (1.8)</td>
</tr>
<tr>
<td>7-8</td>
<td>0.5 (1.6)</td>
<td>0.4 (1.3)</td>
<td>0.4 (1.2)</td>
</tr>
<tr>
<td>8-9</td>
<td>0.8 (1.4)</td>
<td>0.3 (1.0)</td>
<td>0.3 (0.9)</td>
</tr>
<tr>
<td>9-10</td>
<td>0.5 (1.8)</td>
<td>0.3 (0.9)</td>
<td>0.3 (0.8)</td>
</tr>
</tbody>
</table>

Data are median (95th percentile)
TABLE 2

<table>
<thead>
<tr>
<th>Duration of Second Stage (hours)</th>
<th>Parity 0</th>
<th>Parity 1</th>
<th>Parity 2+</th>
</tr>
</thead>
<tbody>
<tr>
<td>With Epidural</td>
<td>1.1 (3.6)</td>
<td>0.4 (2.0)</td>
<td>0.3 (1.6)</td>
</tr>
<tr>
<td>Without Epidural</td>
<td>0.6 (2.8)</td>
<td>0.2 (1.3)</td>
<td>0.1 (1.1)</td>
</tr>
</tbody>
</table>

Data are median (95\textsuperscript{th} percentile)

**Additional considerations**

- Amniocentesis for fetal lung maturity may be appropriate in rare clinical situations. A mature fetal lung test before 39 weeks’ gestation, in the absence of appropriate clinical circumstances is **not** an indication for delivery.
- Non-medically indicated induction of labor should be undertaken only after a thorough discussion with the patient and documentation of the risks of this procedure as opposed to awaiting natural labor.
- Non-medically indicated induction prior to 39 completed weeks’ of gestation is strongly discouraged.
- Induction in nulliparous women is strongly discouraged
- Induction in women with an unfavorable cervix should be approached with caution.
- In the absence of a complicating condition in which expedited delivery has been shown to improve either maternal or fetal outcome, oxytocin administration should be instituted only after a patient clearly meets both longstanding, well-defined criteria for prolonged latent phase, protracted active phase, protracted second stage and hypotonic uterine dysfunction
- Once these contraction parameters have been achieved, failure of subsequent labor progression over an appropriate time period should lead to consideration of a cesarean delivery rather than more oxytocin
- Oxytocin should be continuously titrated to the lowest dose compatible with a physiologic rate of labor progress
- Consider turning oxytocin off in active phase of labor as some patients will contract on their own.

**References:**


