# Oxytocin Guideline

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<th>8</th>
<th>ID Number:</th>
<th>GUDNM004</th>
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<td>June 2016</td>
<td>Review Date:</td>
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<td>Guideline</td>
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<td>Division:</td>
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### Job Title:
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## Policy Dissemination
- Intranet

## Policy Consultation

## Corporate Approval and Ratification

<table>
<thead>
<tr>
<th>Name of Committee</th>
<th>Guidelines Group</th>
<th>Date: June 2016</th>
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## Document Control / History

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<tr>
<td>5</td>
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<td>7</td>
<td>Review and re date</td>
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### Document Reference

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<td>NICE (2014) NICE guideline CG190, Intrapartum care for healthy women and babies</td>
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### Trust Associated Documents:
- Care of women in labour
- Fetal monitoring in labour guidelines.
- VBAC guidelines

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To be read in conjunction with any policies listed in Trust Associated Documents.

1 Document Summary

This guideline describes the process by which all women who require the use of oxytocin in the first and second stages of labour are managed including:

- Assessment prior to commencement of oxytocin
- Documentation of an individual management plan in the health records
- Dose schedules, including frequency of increment
- When to stop oxytocin
- Monitoring arrangements for the woman and fetus following NICE guidance

2 Introduction

All women who have had a diagnosis of a delay in labour, in either the first or second stage, should be offered an amniotomy and the use of oxytocin to augment their labour (NICE 2007).

3 Purpose

The purpose of this guideline is to give guidance to all staff caring for a woman in which oxytocin therapy is used in either the first or second stage of labour.

4 Definitions

4.1 Oxytocin: hormone that is synthesised in hypothalamus and released in the blood stream. Amongst it many functions, it stimulates uterine muscle contractions.

4.2 Syntocinon: trade name of synthetic oxytocin.

A diagnosis of delay in established first stage of labour needs to take into consideration all aspects of progress in labour and should include:

- Cervical dilatation of less than 2cm in 4 hours for first labours.
- Cervical dilatation of less than 4cm in 4 hours for second and subsequent labours (including VBAC)
- Descent and rotation of the fetal head.
- Changes in the strength, duration and frequency of uterine contractions.

A diagnosis of delay in the second stage of labour is dependant on parity.

4.3 Nulliparous women: Birth would be expected to take place within 3 hours of the start of the second stage in most women. A diagnosis of delay in the active second stage should be made when it has lasted 1 hour (the active second stage begins
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when coordinated pushing commences). It has been agreed locally not to incorporate the current NICE guidance to allow four hours for the second stage.

4.4 **Parous women:** Birth would be expected to take place within 2 hours of the start of the second stage in most women. A diagnosis of delay in the active second stage should be made when it has lasted 1 hour.

4.5 **NICE:** National Institute of Health and Clinical Excellence (NICE) is an independent organisation responsible for providing national guidance on promoting good health and preventing and treating ill health.

4.6 **VBAC:** Vaginal birth after Caesarean Section.

5 **Duties (Roles and Responsibilities)**

5.1 **Directorate Managers**

It is the responsibility of the Directorate midwifery managers to ensure that midwives are aware of this guideline and its application in practice.

5.2 **Delivery Suite Coordinator**

It is the responsibility of the delivery suite coordinator to monitor the progress of a woman with delay in established labour and provide professional support to the midwife providing care for the woman.

5.3 **Midwives**

It is the responsibility of the midwife providing care for the woman to:

- Ensure adequate labour progress and to inform the delivery suite coordinator and middle grade on call if delay is suspected or diagnosed.
- Commence CTG monitoring if this is not in place already
- Ensure that the woman has adequate pain relief prior to the commencement of oxytocin.
- Prepare the oxytocin as detailed on the drug chart and commence the infusion following the obstetric management plan, ensuring a minimum delay.

5.4 **Obstetrician (middle-grade)**

It is the responsibility of the obstetrician to:

- Review the woman if a delay in labour is suspected.
- Diagnose delay and document an individual management plan using the oxytocin regime detailed in this guideline and prescribe the oxytocin.
- Explain to the woman the effect that oxytocin will have on her labour.
- Monitor the progress of the labour and contact the consultant on call if labour continues to be delayed.

5.5 **Obstetric Consultant**
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It is the responsibility of the consultant obstetrician on call to provide guidance to the middle grade when requested, if labour continues to be delayed.

5.6 Anaesthetist

It is the responsibility of the anaesthetist to provide an epidural for analgesia prior to the commencement of oxytocin if that is the woman’s preferred method of pain relief.

6 Assessment prior to commencing oxytocin

Nulliparous Women

The middle grade on call should confirm the full assessment (as performed by the midwife) of the woman prior to commencing oxytocin. This assessment should include:

- Abdominal palpation
- Vaginal examination
- Assessment of maternal and fetal wellbeing
- Pain relief options
- Woman’s history

Multiparous Women (one or more vaginal deliveries)

The middle grade must personally review the mother and confirm that there are no obvious signs of obstructed labour. If there is any doubt, the case must be discussed with the consultant on-call.

7 Syntocinon use during Vaginal Birth After Caesarean (VBAC)

This requires very close surveillance and should only be considered appropriate to stimulate labour, i.e. commence contractions in the presence of SROM.

If Syntocinon use is being considered to augment labour (increase the uterine activity during labour), the case must be discussed with the on-call consultant prior to commencing the infusion.

The management should follow the following scheme, assuming a normal CTG:

1. Vaginal examination confirms no obvious obstructed labour
2. Syntocinon commenced and increased in line with normal regime
3. Vaginal examination after four hours to confirm progress…
   i. Progress confirmed – four-hourly examinations
   ii. No progress – repeat vaginal examination in two hours
   iii. Two hours later, still no progress – strongly recommend caesarean section.
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8 Documentation of an individual management plan

Following assessment, the middle grade should document an individual management plan in the notes, detailing the reason for use of oxytocin, when labour progress should be assessed and by whom.

9 Oxytocin Regime

Dilution of 10iu Oxytocin in 49ml Normal Saline, hence 0.3 mls per hour = 60 milliunits of oxytocin per hour.

Commence infusion at 0.3mls/hr = 1 mU/min = 60 mU/hour.

<table>
<thead>
<tr>
<th>Times after starting (minutes)</th>
<th>Oxytocin dose (milliunits/minute)</th>
<th>Oxytocin dose (milliunits/hour)</th>
<th>Volume infused (mls/hour)</th>
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</thead>
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<td>0</td>
<td>1</td>
<td>60</td>
<td>0.3</td>
</tr>
<tr>
<td>30</td>
<td>2</td>
<td>120</td>
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<td>270</td>
<td>32</td>
<td>1920</td>
<td>9.6*</td>
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</table>

*Discuss with Middle Grade or Consultant.

The infusion rate should be titrated against uterine contractions aiming for a frequency of 3 to 4 contractions every ten minutes, lasting about 60 seconds, providing the fetal heart remains satisfactory.

- With multiparous women it may be possible to reduce the rate of infusion once good contractions have been established and there is good progress, and this is encouraged.
- Special care should be taken to exclude mechanical obstruction in the multiparous woman.
- **Any further increase in infusion rate outside the above regimen** should be by increasing the strength of the concentration. **This must be discussed with the consultant on call.**
- The oxytocin regime must be followed for labour induction, stimulation and augmentation cases.
After delivery the oxytocin infusion should be maintained for one hour, gradually reducing the rate.

10 Use of Oxytocin in the Second Stage

If oxytocin is started in the second stage of labour, due to poor contractions, the regime should be discussed with the middle grade doctor. The same concentration should be used but started at 0.2ml/hr and doubling the infusion rate every 10-15 minutes, in order to establish a reasonable dosage within the short period of time available. This increase in the rate must be documented in the notes by the middle grade. If contractions appear to be tailing-off during the passive phase of the second stage, it would be prudent to start oxytocin at this time rather than waiting for the active phase and having to start after pushing has failed to result in a delivery.

11 Stopping Oxytocin in Labour

If the CTG trace is normal, oxytocin may be continued until the woman is experiencing 3-4 contractions every 10 minutes. Oxytocin should be reduced or stopped if:

- Uterine Hyperstimulation occurs. (Contractions occurring more frequently than 5 in 10 minutes).
- Single (tonic) contraction lasting > 2 minutes.
- The CTG trace is classified as suspicious +/- contraction frequency is 4:10. This should be reviewed by an obstetrician.
- The CTG trace is classified as pathological +/- there is excessive uterine activity.

A full assessment of the fetal condition must be undertaken by an obstetrician before oxytocin is recommenced. If a fetal blood sample is considered necessary, this should be performed with the syntocinon running to ensure an accurate representation of the fetal condition with effective contractions.

The oxytocin can be restarted after 15 minutes provided the indication for discontinuing the infusion has resolved. The infusion should be recommenced at a rate one level lower than previously.

12 Monitoring Arrangements for Woman and Fetus

A midwife and/or a student midwife should provide one-to-one care whilst oxytocin infusion is in progress.

- Maternal observations are carried in accordance with GUDNM089. Care of Women in Labour guideline.
- Fetal wellbeing should be assessed using continuous electronic fetal monitoring (EFM) (See Guideline GUDNM059) and the cardiotocograph (CTG) trace should be assessed and documented in the notes.
13 Documentation

Once oxytocin is started, the partograph and EFM must be started, documentation must follow:

- GUDNM089-4 Care of women in labour
- GUDNM059-6 Fetal monitoring in labour guidelines.
- GUDNM007-7 guidelines.

The commencement, increasing and stopping of oxytocin in labour must be clearly documented with management plans where necessary.

14 Training and Implementation

Training to ensure competency in CTG analysis is done through supervised practice and a mandatory fetal monitoring workshop which all midwives and obstetricians have to attend.

15 Monitoring and Review

The Lead Midwife for delivery suite will monitor compliance with the record keeping standards of this guideline. This will be presented annually at the audit meetings as part of the record keeping audit. The minutes of these meetings will provide an accurate record of the discussions and action points identified.

More detailed monitoring is described in the following table:

<table>
<thead>
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<th>Objective to be monitored</th>
<th>Measure/Tool</th>
<th>Frequency</th>
<th>Lead</th>
<th>Reporting Arrangements</th>
<th>Actions arising including identifying leads to take actions forward in agreed timescales</th>
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<td>• 1% of women where oxytocin is used using Trust record keeping template</td>
<td>Annually</td>
<td>Lead Midwife for delivery suite</td>
<td>Audit meetings</td>
<td>Any deficiencies identified including identification of training needs and individual feedback to relevant practitioner</td>
<td>As identified in action plan from audit results</td>
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### 16 Equality Impact Assessment Statement & Tool – Appendix 1

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All public bodies have a statutory duty under the Equality Act 2010. To have due regard to the elimination of discrimination, harassment, victimisation and any other conduct prohibited by the Act.

The Trust aims to design and implement services, policies and measures that meet the diverse needs of our service population and workforce, ensuring that none is placed at a disadvantage over others. This document was found to be compliant with this philosophy.

Equality Impact Assessments will ensure discrimination does not occur also on the grounds of any of the protected characteristics covered by the Equality Act 2010.

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