## Oxytocin
**For the active management of third stage of labour and treatment of postpartum haemorrhage**

<table>
<thead>
<tr>
<th>Staff Characteristics</th>
<th>Registered Midwife</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Clinical Details</strong></td>
<td></td>
</tr>
<tr>
<td>Clinical Situation for which medicine is to be used</td>
<td>For the active management of third stage of labour and treatment of postpartum haemorrhage.</td>
</tr>
</tbody>
</table>
| **Clinical Criteria for inclusion** | Women $\geq$ 16 years requiring:  
- Active management of the third stage of labour.  
- Treatment of postpartum haemorrhage. |
| **Clinical Criteria for exclusion** |  
- Individuals<16 years of age.  
- Known hypersensitivity to oxytocin or any of the excipients of Syntocinon®.  
- Hypertonic uterine contractions.  
- Mechanical obstruction to delivery or fetal distress.  
- Any condition in which, for fetal or maternal reasons, spontaneous labour is inadvisable and/or vaginal delivery is contra-indicated:  
e.g., significant cephalopelvic disproportion; fetal malpresentation; placenta praevia and vasa praevia; placental abruption; cord presentation or prolapse; over distension or impaired resistance of the uterus to rupture as in multiple pregnancy; polyhydramnios; grand multiparity and in the presence of a uterine scar resulting from major surgery including classical caesarean section.  
Oxytocin should not be used for prolonged periods in patients with oxytocin-resistant uterine inertia, severe pre-eclamptic toxaemia or severe cardiovascular disorders.  
In the case of postpartum haemorrhage benefits of treating with oxytocin outweigh the risks. |
| **Management of excluded women and those not wishing to receive care** |  
- Refer to medical staff as appropriate.  
- Document action / refusal in woman’s maternity handheld record or community notes. |
| **Use in pregnancy or lactation** | Oxytocin is not expected to present a risk of fetal abnormalities when used as indicated. Oxytocin may be found in small quantities in mother’s breast milk. However, oxytocin is not expected to cause harmful effects in the newborn because It passes into the alimentary tract where it undergoes rapid inactivation. |
| **Cautions and/or reasons for seeking further advice from a doctor** |  
- Failure to control postpartum haemorrhage.  
- Woman fails to progress in labour.  
- Woman fits exclusion criteria.  
- Woman suffers an adverse drug reaction.  
- Chronic dosing is required.  
- Woman declines medication. |
| Cautions and action that will be taken if a caution applies | • Check for and document any allergies.  
• Check and document past medical and drug history and current medication to ascertain potential for overdose.  
• If a caution applies consult with a doctor.  
• Document consultation in woman’s maternity handheld record or community notes.  
• Refer to current BNF for latest information on interactions |

<table>
<thead>
<tr>
<th>Description of Treatment</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Name / Form / Strength of Medicine</strong></td>
<td>Oxytocin / Injection / 5units, 10 units</td>
</tr>
<tr>
<td><strong>Dosage</strong></td>
<td></td>
</tr>
</tbody>
</table>
**Active management of the third stage of labour:**  
5 or 10 units by IM injection after delivery of the baby  

**Treatment of postpartum uterine haemorrhage:**  
5 units by IV injection followed in severe cases, or in the event of ongoing bleeding, by IV infusion of a solution containing 40 units of oxytocin in 500ml of an electrolyte-containing diluent, run at 10 units per hour for 4 hours (different units may have different local guidelines for PPH management so please refer to these for further guidance). |
| **Route of administration** | • IV infusion / intravenous / intramuscular |
| **Frequency of administration** | According to local Trust guidelines |
| **Duration of treatment** | According to local Trust guidelines |
| **Legal Status** | • POM – midwife may administer as medicine is on midwives exemption list. |
| **Storage requirements** | Store in a refrigerator at 2 - 8°C.  
May be stored up to 30°C for 3 months, but must then be discarded |
| **Warnings** | May cause: Water intoxication and hyponatraemia if excessive doses used. Avoid large infusion volumes and restrict fluid intake by mouth. Symptoms of water intoxication include:  
1. Headache, anorexia, nausea, vomiting and abdominal pain.  
2. Lethargy, drowsiness, unconsciousness and grand-mal type seizures.  
3. Low blood electrolyte concentration.  
4. Administration of oxytocin at excessive doses results in uterine overstimulation which may cause fetal distress, asphyxia and death, or may lead to hypertonicity, tetanic contractions or rupture of the uterus.  
5. Careful monitoring of fetal heart rate and uterine motility (frequency, strength, and duration of contractions) is essential, so that the dosage may be adjusted to individual response.  
6. Since it has been found that prostaglandins potentiate the effect of oxytocin, it is not recommended that these drugs are used together. If used in sequence, the patient's uterine activity should be carefully monitored.  
7. A dosing interval of at least 30 minutes is recommended for the sequential use of oxytocin following the removal of Propess® |
vaginal delivery system.

8. When administering oxytocin IV administer SLOWLY as it may cause an acute short-lasting hypotension accompanied with flushing and reflex tachycardia.
9. Use with caution in women who have a re-disposition to myocardial ischaemia due to pre-existing cardiovascular disease.

### Follow-up

- Monitor for side effects, which may include gastrointestinal symptoms, skin rashes and cardiac arrhythmias. If adverse events occur discontinue infusion and call medical practitioner.
- Refer if woman develops side/adverse effects or if there is an inadequate response.
- Refer immediately in case of overdose.

### Undesirable effects

Oxytocin may occasionally cause nausea, vomiting, haemorrhage or cardiac arrhythmias. In a few cases, skin rashes and anaphylactoid reactions associated with dyspnoea, hypotension, or shock have been reported.

- If a serious adverse reaction is suspected please report to the MHRA Yellow Card Scheme [http://yellowcard.mhra.gov.uk/](http://yellowcard.mhra.gov.uk/)

### Overdose

- Immediate assessment / treatment is essential – refer to medical staff.
- Manage in accordance with established treatment guidelines or see BNF overdose section.
- For further advice contact National Poisons Centres 0844 892 0111.

### Advice to be given to the woman

- Explain treatment and course of action.
- Side effects explained.
- Verbal consent obtained before administration.
- It is good practice to offer the woman the manufacturer’s Patient Information Leaflet to support any verbal advice provided.

### Monitoring arrangements during and after treatment and follow-up required.

- If the woman suffers a serious adverse drug reaction, seek immediate medical assistance.
- Monitor for side effects and effectiveness.
- To be reviewed by doctor if inadequate response.

### Records to be kept

Must be written in the once only medicines and pre-medications section of the medicine kardex. The person who writes up the medication must write their designation after their signature e.g. Midwife Band (*) record the administration, date, time and name of practitioner in the relevant section of the woman’s maternity handheld record or community notes.

### References

- Syntocinon®10 units SPC 4th March 2013 [www.medicines.org.uk](http://www.medicines.org.uk)
- Syntocinon® 5 units SPC 6th March 2013 [www.medicines.org.uk](http://www.medicines.org.uk)
- BNF 67
- Postpartum Haemorrhage, Prevention and Management (Green-top 52) RCOG Green top guidelines May 2009 [http://www.rcog.org.uk/guidelines](http://www.rcog.org.uk/guidelines)
- For IM use – Supply and administration of medicinal products outside of their licence, NMC circular Midwives Exemptions 07/2011