Drug Therapy Protocols: Oxytocin

Disclaimer and copyright
©2018 Queensland Government

All rights reserved. Without limiting the reservation of copyright, no person shall reproduce, store in a retrieval system or transmit in any form, or by any means, part or the whole of the Queensland Ambulance Service (‘QAS’) Clinical practice manual (‘CPM’) without the prior written permission of the Commissioner.

The QAS accepts no responsibility for any modification, redistribution or use of the CPM or any part thereof. The CPM is expressly intended for use by QAS paramedics when performing duties and delivering ambulance services for, and on behalf of, the QAS.

Under no circumstances will the QAS, its employees or agents, be liable for any loss, injury, claim, liability or damages of any kind resulting from the unauthorised use of, or reliance upon the CPM or its contents.

While effort has been made to contact all copyright owners this has not always been possible. The QAS would welcome notification from any copyright holder who has been omitted or incorrectly acknowledged.

All feedback and suggestions are welcome, please forward to:
Clinical.Guidelines@ambulance.qld.gov.au

<table>
<thead>
<tr>
<th>Date</th>
<th>April, 2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Purpose</td>
<td>To ensure a consistent procedural approach to Oxytocin administration.</td>
</tr>
<tr>
<td>Scope</td>
<td>Applies to all QAS clinical staff.</td>
</tr>
<tr>
<td>Author</td>
<td>Clinical Quality &amp; Patient Safety Unit, QAS</td>
</tr>
<tr>
<td>Review date</td>
<td>April, 2021</td>
</tr>
<tr>
<td>Information security</td>
<td>This document has been security classified using the Queensland Government Information Security Classification Framework (QGISCF) as UNCLASSIFIED and will be managed according to the requirements of the QGISF.</td>
</tr>
</tbody>
</table>

This work is licensed under the Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International License. To view a copy of this license, visit http://creativecommons.org/licenses/by-nc-nd/4.0/.
**Drug class**
Oxytocic

**Pharmacology**
Synthetic oxytocin is a uterine stimulant that causes uterine contractions by changing calcium concentrations within uterine muscle cells. Oxytocin administered during the third stage of labour assists with placental separation, raises the tone of the uterine musculature and minimises further uterine blood loss.

**Metabolism**
Oxytocin is metabolised by the liver and excreted by the kidneys.

---

**Indications**
- Active management of the third stage of labour (following confirmed delivery of all foetuses)
- Prevention AND/OR treatment of primary postpartum haemorrhage

---

**Contraindications**
- Allergy and/or Adverse Drug Reaction
- Undelivered foetuses

---

**Presentation**
- Ampoule, 10 International units (IU) / 1 mL

---

**Precautions**
- Myocardial ischaemia
- May potentiate hypotension when administered with analgesia

---

**Side effects**
- Nausea AND/OR vomiting
- Headache
- Bradycardia
- Tachycardia

---

**Onset**
- IM 2–4 minutes

---

**Duration**
- 30–60 minutes

---

**Half-life**
- N/A

---

*April, 2018*
Special notes (continued)

• Skin to skin contact and initiation of breastfeeding/nipple stimulation should occur in addition to the use of uterotonic medications to promote natural oxytocin release and promote normothermia, maternal/neonatal bonding and early breastfeeding.

Schedule

• S4 (Restricted drugs).

Routes of administration

- Intramuscular (IM)

Special notes

• The use of uterotonics for the prevention of postpartum haemorrhage during the third stage of labour is recommended for all births.[1]

• When Oxytocin is administered for the management of the third stage of labour, multiple births must be excluded prior to the drug being administered.

• Oxytocin is only to be administered to the consenting patient who agrees to an active management of the third stage of labour. Women who prefer a physiological management must birth the placenta unaided, by maternal effort and the natural force of gravity.

• To allow for the benefits of delayed cord clamping it is acceptable to do a modified active third stage management by waiting until the cord has stopped pulsating to administer oxytocin. This is particularly important in neonatal resuscitation where the baby is resuscitated between the mother’s legs (where appropriate) to receive the benefit of a pulsing cord and placental perfusion.

Adult dosages

• Active management of the third stage of labour (following confirmed delivery of all foetuses)

• Prevention AND/OR treatment of primary postpartum haemorrhage

| Im | 10 International units Single dose only. |
| ACP2 | CCP |

Paediatric dosages

Note: QAS officers are NOT authorised to administer oxytocin to paediatric patients.