Third stage of labour

Aim
To support staff in discussing with women the management of the third stage of labour.

Key points
1. Active management of third stage should be recommended to all women as it shortens the third stage and reduces the risk of postpartum haemorrhage and the need for blood transfusion.
2. Active management of third stage definition includes:
   - Routine use of uterotonic (oxytocic) medications
   - Early/deferred clamping and cutting of the cord
   - Controlled cord traction (CCT) after signs of separation of the placenta.
3. Delayed cord clamping for 2-3 minutes for normal women in third stage does not appear to increase the risk for post-partum haemorrhage (PPH). It can provide a benefit to the infant in prevention of anaemia in the first 6 months of life, and additionally in pre-term infants has been shown to decrease the risk for ventricular haemorrhage and blood transfusion. It is associated with increased jaundice requiring phototherapy.
4. Onset of strong uterine contraction occurs 2-3 minutes after the administration of oxytocin
5. Controlled cord traction (CCT)
   - Never apply CCT without applying counter pressure to the uterus.
   - Apply CCT with counter pressure once the uterus is well contracted.
   - Do not encourage maternal effort in conjunction with CCT.
   - If releasing downward pressure on cord, this must be done before relaxing counter pressure of the uterus.
6. Physiological management of third stage is associated with a higher rate of postpartum haemorrhage.
7. Women requesting physiological management of the third stage should be provided with written information regarding the risks associated with this and complete a Non Standard Management Plan with their primary care provider.

8. Delay in third stage is defined as follows:
   - Active Management – placenta and membranes not delivered within 30 minutes of the birth of the baby
   - Physiological management – placenta and membranes not delivered within 60 minutes of the birth of the baby

### PROCEDURE

<table>
<thead>
<tr>
<th>1</th>
<th>ACTIVE MANAGEMENT</th>
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<tbody>
<tr>
<td>1.1</td>
<td><strong>Administer an oxytocic to the woman with the birth of the anterior shoulder or immediately after the birth of the baby</strong></td>
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</table>

For **low risk** women give oxytocin 10 units IMI

For **high risk** women, provided there are no pre-existing contraindications, give one ampoule of **Syntometrine®** (oxytocin 5 units and ergometrine 0.5mg) IMI

Do not give **Syntometrine®** (oxytocin 5 units and ergometrine 0.5mg) to women with pre-eclampsia, eclampsia, hypertension, disorders of cardiac, hepatic or renal function, occlusive vascular disease or sepsis.³

In breech births or abnormal presentations **Syntometrine®** should not be given until birth of fetal head and body is completed.³

For multiple births ensure administration occurs after the birth of last infant.³

The purpose of oxytocin is to enhance uterine contraction and retraction, hasten placental separation and reduce blood loss.. See KEMH Clinical Guidelines: Restricted Area Guidelines (Intranet only): Primary Post Partum Haemorrhage for women at risk for PPH.

Ergometrine commonly produces nausea and vomiting and may lead to raised blood pressure.⁴

Caution must be exercised with oxytocin administration if there is a possibility of an undiagnosed twin (e.g. no ultrasound performed during pregnancy).⁴
### PROCEDURE

For women with a high BMI, if the midwife’s assessment is that the needle used for IM injection is not of the sufficient length to administer a drug into muscle, the midwife may consider administering 2 units oxytocin IV (if woman has IV access).

### ADDITIONAL INFORMATION

Will ensure administration of drug into intended site.

| 1.2 | Advise accoucher when oxytocic is administered |
| 1.3 | Document time that oxytocic is administered |
| 1.4 | **Cord clamping** |
|     | Clamp and cut the umbilical cord within 2-3 minutes of birth.\(^7\) |
|     | Earlier cord clamping may be required for prompt treatment of the infant or for harvesting of stem cells.\(^5\) |
|     | Delaying cutting of the umbilical cord within 2-3 minutes of birth of term infants does not appear to increase the risk of PPH. It may be advantageous to the infant by improving their iron status for up to 6 months after birth, but has a possible additional risk for jaundice requiring phototherapy\(^6,7\) |
|     | Delayed cord clamping may be less optimal in areas where treatment for jaundice is less accessible.\(^6\) |
|     | The increase in polycythaemia in term infants from delayed cord clamping appears benign.\(^7\) |
|     | Delayed cord clamping may decrease the likelihood of feto-maternal transfusion.\(^9\) In pre-term infants it is associated with less need for transfusions and less ventricular haemorrhages.\(^9,10\) |

<p>| 1.5 | Document time cord was clamped |</p>
<table>
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<tr>
<td><strong>1.6 Collection of cord blood</strong></td>
<td>Umbilical cord pH and blood gas analysis are useful in screening for and investigating the origin of intrapartum asphyxia and acidaemia. ¹¹</td>
</tr>
</tbody>
</table>

Double clamp and cut a separate section of the cord for arterial and venous cord blood pH and gas analysis.

See Clinical Guidelines, O&M, Intrapartum: Specimen Collection: [Cord Blood Collection / Analysis](#).

| **1.7 Applying controlled cord traction** | |
| **1.7.1 Reclamp the cord close to the introitus and hold in one hand.** | Signs of placental separation: |
| | • The uterus becomes firm, rises up and is ballotable. |
| | This is accompanied by signs of descent: |
| | • A trickle of blood |
| | • Lengthening of the cord |

| **1.7.2 Place a hand on the abdomen to detect uterine contraction and placental separation.** | |
| **Do NOT manipulate the fundus.** | Fundal manipulation may lead to partial separation of the placenta and excessive bleeding. ¹² |

| **1.8 Delivering the placenta and membranes** | |
| | |
### PROCEDURE

<table>
<thead>
<tr>
<th><strong>1.8.1</strong> Once placental separation is confirmed:</th>
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<tr>
<td>• Stabilise the uterus by placing the hand just above the symphysis pubis and apply counter pressure during CCT. This is sometimes referred to as “guarding the uterus”.</td>
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<tr>
<td>• Pull downward on the cord following the direction of the birth canal until the placenta appears at the vulva. Discontinue CCT if the placenta does not descend after 30 to 40 seconds.</td>
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<tr>
<td>• Gently hold the cord and wait until the uterus is well contracted again.</td>
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<tr>
<td>• With the next contraction repeat CCT with counterpressure.²</td>
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</table>

**Note:** Never apply cord traction without applying counter traction above the symphysis pubis and without a well-contracted uterus. Traction should be eased or discontinued if there is any suggestion of tearing of the cord, or if the uterus relaxes.²

| **1.8.2** When the placenta is viewed at the introitus apply upward traction on the cord. |

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<tr>
<td>The aim of controlled cord traction is to deliver the placenta immediately after its separation thereby reducing the risks of a retained placenta and excessive blood loss.¹³</td>
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</table>

The aim is deliver the placenta with uterine contraction.

If tension is applied to the umbilical cord without uterine contraction the risk for uterine inversion increases.¹⁴

Applying upward traction when the placenta becomes visible follows the curve of Carus.¹²
### PROCEDURE
Remove the hand from above the supra-pubis once the placenta is mostly visible and delivered. As the placenta emerges:

- Use both hands to support the placenta and gently turn it until the membranes are twisted and slowly pull to complete the third stage
- If the membranes do not emerge use an upward and downward or twisting motion to ease them gently out of the vagina

<table>
<thead>
<tr>
<th>2</th>
<th>PHYSIOLOGICAL MANAGEMENT</th>
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<tbody>
<tr>
<td>2.1</td>
<td>Assist woman to breastfeed</td>
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<td></td>
<td>Assist woman to breastfeed in a comfortable position</td>
</tr>
</tbody>
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| 2.2 | Observe for signs of placental separation |
|     | Signs of placental separation: |
|     | • the uterus becomes firm, rises up and is ballotable.  This is accompanied by signs of descent: |
|     | • a trickle of blood lengthening of the cord |
|     | The woman may experience low pelvic pain and heaviness as the placenta descends into the lower segment. An upright position may assist her to birth the placenta by gravity and pelvic opening positions. |

If the membranes tear, the upper vagina and cervix should be examined wearing sterile gloves and sponge forceps are used to gently remove any visible membranes.²
### 2.3 Delivery of the placenta and membranes

Assist the woman to deliver the placenta and membranes by:

- Informing the woman what is happening
- Encouraging the woman to push or bear down as she desires.

When the placenta is viewed at the introitus apply upward traction on the cord.

Remove the hand from above the supra-pubis once the placenta is mostly visible and delivered. As the placenta emerges:

- Use both hands to support the placenta and gently turn it until the membranes are twisted and slowly pull to complete the third stage
- If the membranes do not emerge use an upward and downward or twisting motion to ease them gently out of the vagina

### 3 Note the time of delivery of the placenta

### 4 Management for delay in third stage

Notify the obstetric medical team and the Midwife Co-ordinator when:

- Active management - the third stage is not completed within 30 minutes of the birth of the baby.
- Physiological management - the third stage is not completed within 60 minutes of the birth of the baby.
- Signs of PPH/brisk bleeding

A third stage of labour longer than 18 minutes is associated with a significant risk of PPH (defined as 1000mls in this study). After 30 minutes the risk for PPH is 6 times higher than completion of third stage prior to 30 minutes after birth.¹⁵
<table>
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<td><strong>5</strong> Fundal assessment</td>
<td>Expels retroplacental clots and stimulates the uterus to contract thereby preventing PPH.</td>
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<tr>
<td>Following the delivery of the third stage immediately palpate the fundus of the uterus to ensure it is well contracted.</td>
<td>Massage the fundus every 15 minutes for the 1st hour If bleeding continues refer to Primary Post Partum Haemorrhage guideline</td>
</tr>
</tbody>
</table>

| 6 | Examine the placenta and membranes | Determines completeness of the placenta and membranes and detects abnormalities that may necessitate additional monitoring or treatment of the woman or infant. |
| 6.1 | Check the placenta for: | Incomplete placenta, or membranes, or vessels indicating the presence of a succenturiate lobe may be indicative of retained products of conception. As a result the uterus may fail to contract adequately and predispose the woman to PPH and/or puerperal infection. |
| | - general shape and completeness | The presence of only one umbilical artery may be associated with congenital abnormalities, for example renal agenesis. |
| | - obvious clots | |
| | - presence of calcification and/or infarction | |
| | - evidence of abruption, or oedema | |
| | - offensive odour | |
| 6.2 | Check the membranes for completeness and presence of: | |
| | - 1 amnion and 1 chorion | |
| | - blood vessels | |
| | - succenturiate lobes | |
| 6.3 | Check the cord for: | |
| | - presence of 2 arteries and 1 vein | |
| | - insertion site | |
| | - anomalies | |
| 6.4 | Immediately notify the Obstetric medical team and Midwife Coordinator if the placenta or membranes are incomplete. | |
## PROCEDURE

| 6.5 | Following checking of the third stage (placenta and membranes):
|     | • double bag the placenta and place in a rigid walled leak proof plastic container. Apply an addressograph to plastic bag and outside of container. Once sealed the container should not be opened again while on hospital premises.
|     | • If the woman wishes to take her placenta home, the container is to be dated and label “Human tissue for collection by <insert name>” |

## ADDITIONAL INFORMATION

See Clinical Guidelines, O&M, Intrapartum: Specimen Collection: 
- Placenta: Indications for Pathological Examination of: 
- Placenta: Safe Handling when Taking Home

See Clinical Guidelines, O&M, Intrapartum: Specimen Collection: 
- Placenta: Safe Handling when Taking Home

A normal placenta when combined with a good perinatal outcome need not be routinely weighed.

## 7 Measuring blood loss

Collect and measure blood loss and add this to the estimated blood loss (i.e. loss that cannot be measured) to obtain total blood loss.

Document total blood loss amount on the Labour and Birth Summery MR 230.01.

Accurate assessment of blood loss is required to determine if excessive which could potentially have a detrimental effect on maternal well-being.\(^\text{12}\)

## 8 Observations

See Clinical Guideline, O&M, Postnatal Care: Immediate Care of the Mother in Labour and Birth Suite Following Birth

## References and resources


Related policies

Obstetrics & Midwifery: Intrapartum:
- Syntometrine For Third Stage
- Specimen Collection: Placenta: Indications for Pathological Examination of; Placenta: Safe Handling when Taking Home

Pharmacy: Syntometrine®

Restricted Area Guidelines (Intranet only): Primary Post Partum Haemorrhage

Related WNHS policies, procedures and guidelines

Keywords: active management, physiological management, expectant management, third stage, labour, birth, syntometrine, oxytocin, syntocinon, oxytocic, 3rd stage, placenta, controlled cord traction (CCT), uterine massage, delayed cord clamping, cord blood collection, delivery of placenta, examination of placenta

Document owner: Obstetrics, Gynaecology & Imaging Directorates

Author / Reviewer: CMS- LBS

Date first issued: 03/2002
### Third Stage of Labour

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<tr>
<th>Last reviewed:</th>
<th>07/03/2017</th>
<th>Next review date:</th>
<th>07/03/2020</th>
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<tbody>
<tr>
<td>Endorsed by:</td>
<td>MSMSC</td>
<td>Date:</td>
<td>02/05/2017</td>
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<tr>
<td>Standards Applicable:</td>
<td>NSQHS Standards: 1 Governance, 4 Medication Safety, 7 Blood Products, 9 Clinical Deterioration,</td>
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