MATERNITY UNIT
GUIDELINE:

IOL FOLLOWING TERMINATION OF PREGNANCY or INTRAUTERINE DEATH
≥ 20 WEEKS GESTATION

SCOPE:
All midwives and obstetricians working in Maternity

AUTHOR:
Midwife Educator & Quality Coordinator

PURPOSE:
To ensure all staff are aware of the correct procedure to follow when using Misoprostol or Syntocinon Infusion for the induction of labour following a termination of pregnancy or intrauterine death ≥ 20 weeks gestation.

MISOPROSTOL
Misoprostol is a prostaglandin E1 Analogue, widely marketed as Cytotec and is registered for use in New Zealand to prevent gastric ulcers resulting from chronic use of NSAIDS. Since it also induces uterine contractions, it is used in obstetrics & gynaecology. For the purpose of this guideline Misoprostol is used to induce labour in women following a TOP or an intrauterine death ≥ 20 weeks gestation.

CONTRAINDICATIONS:
• History of allergy to Misoprostol or other prostaglandin.

PRECAUTIONS:
1. Possible uterine rupture if inappropriate dose administered in a woman with a very distended uterus (e.g. third trimester fetal demise).
2. Note that the dose of medication varies according to the clinical indication

COMMON EFFECTS AND SIDE EFFECTS:
• Vaginal bleeding
• Cramping
• Possible retained placenta
• Diarrhoea or constipation (should resolve within a day)
• Nausea & vomiting (should resolve within 2-6 hours, use antiemetic if needed)
• Flatulence
• Dyspepsia
• Headache
• Dizziness
• Pyrexia
• Shivering
Chills and/or fever. Chills are common, fever less so. If fever persists longer than 24 hours, infection should be ruled out.

**Follow the steps below when administering Misoprostol:**

- Explain to the woman the proposed plan of management and procedure for administration.
- Give the woman the Information of Misoprostol information sheet (Appendix 1) and discuss with her.
- Obstetrician to obtain informed consent on Consent for Misoprostol form (Appendix 2).
- Administer Misoprostol.
  a. ≥ 20wks – 24wks: 800 ug is inserted into the posterior vaginal fornix, followed by 400 ug given orally at three hourly intervals until labour has established or a maximum of five doses (1 x 800 and 4 x 400) has been administered.
  b. 24 - 34 weeks: 200 ug pv followed by 200 ug three hourly x 4 doses orally for a maximum of 5 doses (1 dose vaginally and 4 orally)
     >34 weeks: 100 ug pv followed by 100 ug three hourly x 4 doses orally for a maximum of 5 doses (1 dose vaginally and 4 orally)
  c. Previous low transverse caesarean section (if not using transcervical catheter and/or Syntocinon),
     ≥ 20wks – 24wks: use Misoprostol as above
     24-28 weeks: 200 ug pv followed by 200 ug three hourly x 4 doses orally for a maximum of 5 doses (1 dose vaginally and 4 orally)
     >28 weeks: 50 ug pv followed by 50 ug three hourly x 4 doses orally for a maximum of 5 doses (1 dose vaginally and 4 orally). Contact Pharmacy who will quarter a 200 ug tablet to obtain the correct dose. Please pay particular attention to how small the tablet becomes and can be easily lost within bed sheeting during insertion
- Once administration has been commenced, it is **not** to be interrupted at any time prior to the birth without consulting the obstetrician first.
- The vaginal examination does not need to be a sterile procedure except in the presence of ruptured membranes. Further vaginal examinations are not necessary.
- If labour has not established after 24 hours, the woman is to be reviewed by the obstetrician for further management.

Follow the steps below for management of the woman receiving Misoprostol and refer to the management of intrauterine death & stillbirth guideline, checklist (Appendix 3)

- Blood group and Rhesus status must be established.
- Baseline observations (pulse, BP, Temp, PV Loss)
- Consent for Misoprostol must be signed.
- Obstetrician or midwife to commence Misoprostol regimen as below.
- For women who have not birthed, after 4th dose of oral Misoprostol obstetric review is required.
- Consider an overnight wait to allow woman to rest.
- Expect 90% to deliver within 6-8 hours of commencement of Misoprostol.
• Management of the 3rd stage is to be agreed with the woman, care needs to be taken if CCT is applied as the cord can be friable and snap easily.
• Women receive appropriate counselling/family/whanau/chaplaincy/kiatawhai support.

**SYNTOCINON INFUSION**
Syntocinon is a synthetic form of oxytocin. When syntocinon is used by IV infusion for the induction of labour, its administration at excessive doses may result in uterine overstimulation which may cause hypertonicity, tetanic contractions or rupture of the uterus. Therefore the minimum effective dose should be used.

Syntocinon infusion may be administered for pregnancies ≥ 20 weeks gestation, especially if the woman has an IUFD and a prior uterine scar and we want to be careful with prostaglandins. Syntocinon infusion may be administered to:
• augment/establish labour in these women when appropriate
• control/reduce heavy bleeding post birth (refer to PPH guideline)
• increase contractions to aid expulsion of a retained placenta (refer to retained placenta guideline).

**Prescription & Administration of Syntocinon Infusion for Labour**

• The infusion must be given via an infusion pump.
• The infusion is to be prepared as 100 units of syntocinon in 500 ml normal saline.
• The dosage is increased until labour is established. Women who have had a previous caesarean section need to be managed with caution (see Syntocinon IVI for induction or augmentation of labour guideline).

<table>
<thead>
<tr>
<th>Regime</th>
<th>ml/hour</th>
<th>Dose/mu/min</th>
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<tbody>
<tr>
<td>Increase every 15 minutes</td>
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<td>1</td>
<td>3.3</td>
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<td>2</td>
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<td>3</td>
<td>10</td>
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<tr>
<td>6</td>
<td>20</td>
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<tr>
<td>Increase every hour</td>
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<tr>
<td>12</td>
<td>40</td>
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<td>24</td>
<td>80</td>
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<td>36</td>
<td>120</td>
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<tr>
<td>60</td>
<td>200</td>
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</table>

**Observations & Documentation:**

• Blood group and Rhesus status must be established.
• The woman’s baseline recordings (temperature, blood pressure, pulse) are taken prior to commencement of infusion.
• Pulse and blood pressure are taken at each dose increase until labour is established.
• Half hourly recordings then continue.
• No further dose increase once labour is established.
• Vaginal loss, contractions, and recordings are documented in the Clinical Record.
A fluid balance is maintained
Blood urea and electrolyte levels are checked if syntocinon continues for more than 24 hours.
Management of the 3\textsuperscript{rd} stage is to be agreed with the woman, care needs to be taken if CCT is applied as the cord may be friable and snap easily.
Woman to receive appropriate counselling/family/whanau/chaplaincy/kaiatawhai support.

**Post Delivery Care following use of Misoprostol or Syntocinon**

**Recommended Best Practice**

Follow the steps below to ensure physical and emotional care and documentation is completed for episode of care:

- Administer Anti-D if required.
- Discuss contraceptive needs. Prescribe PRN.
- Ensure thorough discharge advice and follow-up.
- Clinical summary of discharge advice.

**Documentation Requirements**

- Refer to the Management of Intrauterine Death and Stillbirth guideline for management of the baby and placenta and the required documentation and reporting & checklist (Appendix 3).
- SANDS leaflets.
- Complete PMMRC online forms for national database & notify local PMMRC coordinator.

**ASSOCIATED DOCUMENTS:**
- Consent for use of Misoprostol
- Patient information sheet Misoprostol
- Postpartum Haemorrhage guideline
- Retained placenta guideline
- Syntocinon IVI for induction or augmentation of labour guideline
- The Management of Intrauterine Death and Stillbirth guideline

Acknowledgement goes to National Women’s Health for sharing their Termination of Pregnancy – 2\textsuperscript{nd} & 3\textsuperscript{rd} Trimester guideline (2011)

**REFERENCES:**


MIMS New Ethicals (July-December 2009)


UpToDate Diagnosis and Management of Stillbirth (2013)


Appendix 1 – Patient information sheet – Misoprostol

Appendix 2 – Consent for use of Misoprostol

**Date of Approval: February 2016**

**Next Review Date: February 2019**
Medicines are generally registered in New Zealand for specific purposes. Although Misoprostol is a registered medicine, licensed in New Zealand for the treatment of stomach ulcers, it is not specifically licensed for use in pregnancy or childbirth. However, it is known to cause the uterus to contract strongly and is therefore often prescribed by gynaecologists for pregnancy related complications such as incomplete miscarriage, post partum bleeding and fetal demise.

There are more than 200 trials worldwide involving over 35,000 women where Misoprostol has been given for obstetric or gynaecological indications. Misoprostol has been used for this purpose effectively at National Women’s Hospital since 1996 and is recognised as having fewer side effects than other similar products.

We recommend Misoprostol tablets to be taken by mouth, vagina or rectum as per the specialist’s recommendations.

The most common side effect is nausea. Less common is mild diarrhoea, abdominal cramps and vaginal bleeding.

Misoprostol has been found to be both effective and safe; however we require your consent to use it for any obstetrical purpose.

If you have any queries, please ask a member of staff involved with your care.
Appendix 2
CONSENT FOR USE OF MISOPROSTOL

 Interpreter: Yes No Name: Language:

I (name) ........................................................................................................
of (address)..................................................................................................

hereby consent to the use of Misoprostol

I acknowledge that Misoprostol is not registered for this use in New Zealand. I have read the information sheet and agreed to the use of Misoprostol. I acknowledge that the risks and side effects have been explained to me. I have had adequate opportunity to ask questions and have received all the information I want. I understand that I am welcome to ask more information if I wish.

SIGNED: ................................................................. (Woman)

SIGNED: ................................................................. (Interpreter)

DATE: ......................................................

This consent was discussed by me with the signatory, who acknowledges having understood it fully and has had an opportunity to ask questions and have them answered.

SIGNED: ................................................................. (Doctor)

DATE: ......................................................
### Appendix 3

**CHECKLIST FOR INTRAUTERINE DEATH or STILLBIRTH**

*(please print out and use for each stillbirth and file in records)*

#### PRE-ADMISSION:

<table>
<thead>
<tr>
<th>Action</th>
<th>Completed</th>
<th>Date</th>
<th>Signature</th>
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<tbody>
<tr>
<td>Prepare room – BS 5 most suitable as toilet facilities not shared</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Notes in order and relevant – obtain medical records from main file</td>
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<tr>
<td>SANDS booklets given prior to admission if possible (kept in store room in ward 1 behind PN room 4)</td>
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<tr>
<td>O &amp; G notified of pending admission</td>
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</table>

#### ON ADMISSION:

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<tr>
<th>Action</th>
<th>Completed</th>
<th>Date</th>
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</thead>
<tbody>
<tr>
<td>Orientation to the facilities</td>
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<tr>
<td>Begin birth register (check current address and phone number)</td>
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<tr>
<td>Notify admissions and obtain previous records</td>
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<tr>
<td>O &amp; G notified (if not aware)</td>
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<tr>
<td>LMC notified (if not with woman)</td>
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<tr>
<td>Availability of whanau room for extended family if required (security pager 95)</td>
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<tr>
<td>ID/allergy bracelet in place</td>
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<tr>
<td>Admission assessment and vital signs taken and recorded</td>
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<tr>
<td>Relevant clinical procedures and blood serology as indicated by O &amp; G and consented to by woman (see Management of IUD &amp; Stillbirth guideline)</td>
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</tr>
<tr>
<td>Follow procedures in the Perinatal Post-mortems and Placental Histopathology guideline if this has been discussed &amp; consent obtained</td>
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<tr>
<td>Arrangements for placenta confirmed (histology, return to woman if requested as per guideline)</td>
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<td></td>
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<tr>
<td>SANDS booklets available/offered if not already given</td>
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<tr>
<td>Explanation re care, procedures, pain relief, moment of birth (woman’s wishes), encouragement to hold baby, etc.</td>
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<tr>
<td>Availability of hospital chaplain if desired or own church minister</td>
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<tr>
<td>Cultural support required identified as needed</td>
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</tbody>
</table>

#### AT SOME TIME:

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Author: Midwife Educator & Quality Coordinator  
Date of first approval: Oct 2013  
Authorised By: HDD Obstetrics, Clinical Care Manager WCY  
Date last review completed: Feb 2016  
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### SANDS box (depending on gestation)

<table>
<thead>
<tr>
<th>Action</th>
<th>Completed</th>
<th>Date</th>
<th>Signature</th>
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</thead>
<tbody>
<tr>
<td>Availability of baby clothing – SANDS boxes</td>
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<tr>
<td>made up in maternity store room.</td>
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### AFTER THE BIRTH:

<table>
<thead>
<tr>
<th>Action</th>
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<tbody>
<tr>
<td>Take cord blood for CBC differential, nucleated red cell count, group and antibody screen, Guthrie and chromosomal analysis.</td>
</tr>
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</table>

### Care of baby:
1. Weight
2. Admit and obtain NHI from admissions in ED (please confirm they are aware this is FDIU/ stillbirth) so relevant notification can be entered
3. Swabs – ear and throat
4. Wash
5. Measure crown/heel, head circumference
6. Dress/unwrap as family requests
7. Paediatric examination if consented by parents

### Routine PN observations and checks of mother

### Documentation of birth in clinical notes

### Anti-D given as required **within 72 hours**

### Notification as appropriate:
1. LMC
2. Minister
3. Maori Health Liaison officer
4. GP (phone if possible)
5. Well Child to avoid future contact & immunisation appointments
6. **Check & cancel any ANC appts**

### Registration:
(only if after the 20th completed week of gestation (i.e. ≥20+0 wks and/or weighed ≥ 400g).

1. Parents need to Register the Birth please give them the form if applicable
2. Medical certificate of cause of fetal death & neonatal deaths (HP4721 stored at the back of reception) required by undertaker
3. Complete birth register
4. Transfer of charge of body (BDM39). The parents will require this if taking the body
Contact Funeral Services in conjunction with family if registration as above (06 867 9150)

Blessing of room after discharge by hospital chaplain, **whilst all equipment and linen still in the room** (pager 036)

Complete rapid reporting forms for mother & baby either paper copy or on line, within 48 hours of the baby's death (where possible), [www.pmmrc.otago.ac.nz](http://www.pmmrc.otago.ac.nz)
Username: Tairawhiti DHB
Password: tairaw4484 – details to PMMRC local coordinator if LMC/Core staff unable to

<table>
<thead>
<tr>
<th>FOLLOW UP:</th>
<th>Completed</th>
<th>Date</th>
<th>Signature</th>
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<tbody>
<tr>
<td>Postnatal care plan by LMC completed, including care of breasts re suppression of lactation</td>
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<tr>
<td>Grief support need and availability identified – SANDS support group information given</td>
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</tr>
<tr>
<td>Discuss with O &amp; G when follow up appointment (to be seen at gynaecological not antenatal clinic) is required. Inform woman this appointment will be sent to her if not given prior to discharge. Request this appointment.</td>
<td></td>
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</tr>
<tr>
<td>Paediatric appointment made as appropriate</td>
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<tr>
<td>Debrief for staff involved</td>
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