Second Trimester Induction of Labour for Perinatal Loss

Skill Level: **Specialized**, as described in this guideline

Maternity Centre RNs, Maternity Centre LPNs (post delivery care only)

Anesthesiologists, Obstetricians, Family Practice Physicians, Midwives

Social workers, Pastoral Care (as described)

Related Documents and Resources:

1. B-00-07-10020 Perinatal Loss (Miscarriages Stillbirth, Neonatal Death)
2. Prescriber's Orders – 2nd Trimester Induction of Labour with Misoprostol for Fetal Demise (Form No. PH503)

Need to Know

- Misoprostol is commonly used as a single agent for the induction of labour for a second trimester perinatal loss.
- Misoprostol is a synthetic E1 prostaglandin (PGE1). Administration in pregnancy induces cervical effacement and uterine contractions.
- The cervix does not need to be fully dilated to permit delivery of the fetus. Cervical change can be rapid and unpredictable.
- Perinatal loss is difficult for both families and care providers. Each patient's experience is different:
    - some may feel the urge to push with contractions,
    - some may expel the fetus without maternal effort,
    - the length of time varies with each patient
- The role of the team includes:
    - Supporting the family in the event of miscarriage, or stillbirth by assisting in the grieving process.
    - Providing care for the remains of the miscarried or stillborn infant following birth.
    - Ensuring ALL required official documents of the miscarried or stillborn infant are correctly completed and sent to the appropriate location
- Obstetrical consultation is required for all second trimester induction of labour for perinatal loss. Primary care providers can continue to provide support to the patient and family.

Contraindications

- Absolute contraindications

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- Suspected or confirmed ectopic pregnancy
- Gestational trophoblastic disease
- High risk of uterine rupture (i.e. second or third trimester inductions in women with more than one prior hysterotomy, a prior classical or T-shaped uterine incision, or extensive transfundal uterine surgery)
- Intrauterine device (IUD, must be removed before misoprostol is administered)
- Allergy to prostaglandins
- Contraindications to medical or surgical uterine evacuations (e.g. hemodynamically unstable, coagulopathy)

- Relative contraindications
  - Misoprostol-alone regimens should be used with caution in women who are at risk for complications of pregnancy termination (e.g. coagulopathy) due to the unpredictability of the timing of delivery.
  - Severe asthma

PRACTICE GUIDELINE

Equipment & Supplies:

1. IV initiation tray
2. IV Infusion pump and tubing
3. Eye protection
4. Sterile gloves
5. Delivery set
6. Oxytocin as per physician orders
7. Infant cot +/- cuddle cot apparatus

Admission Assessment: (additional resource Appendix D)

1. Nursing Initial Assessment:

- Remove fetal monitor and isolette/warmer from room
- Review maternal prenatal record, pregnancy and medical history
- Identify any risk factors and Rh status
- Ensure the indication for induction of labour is documented
- Assess and document baseline maternal vital signs
- Assess and document baseline uterine activity and document the following:
  - Contraction frequency
  - Contraction duration

- Contraction intensity (mild, moderate and strong)
- Patient's coping

- Labs as per obstetrical orders (e.g. CBC, Group & Screen, etc.)
- Notify Social Work and offer Pastoral Care consultation
- Discuss with the patient/family their wishes around labour, birth and post delivery
- Document all assessment findings

2. Physician Initial Assessment:

- Obtain history and ensure clarity of diagnosis
- Obtain informed consent for induction and autopsy/investigation
- Complete documentation (e.g. Caution Form, Consultation, etc.)
- Provide written orders for induction
- If Rh negative discuss the possible need for Rhesus Immune Globulin with the patient

Procedures/Interventions:

1. Verify the Prescribers Orders, including dosage for induction of labour with misoprostol.
2. Position the patient in lithotomy in preparation for a vaginal examination and placement of misoprostol tablet.
    - The obstetrician will complete a baseline assessment of the cervix before inserting misoprostol
    - The obstetrician inserts the misoprostol tablet into the posterior fornix of the cervix
    - Prior to the insertion of additional doses of misoprostol, the obstetrician must assess the cervix.
3. Ongoing assessment of uterine activity and documentation of the following (on the Partogram):
    1. Contraction frequency
    2. Contraction duration
    3. Contraction intensity (mild, moderate and strong)
    4. Coping
4. Assess for potential side effects of misoprostol:
    - nausea
    - diarrhea
    - abdominal pain
    - bleeding
    - fever and chills/shakes

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Ongoing Assessment:

In the absence of regular painful contractions:

- Monitor vital signs every 4 hours
- Diet as tolerated
- Activity as tolerated

When regular, painful contractions are established:

- Monitor vital signs every hour. Temperature may increase without sepsis. Need to differentiate between pyrexia due to misoprostol (a transient fever, possibly associated with shivering shortly after administration of medication, peaking within 1 to 2 hours and resolving over a few hours) and possible sepsis (also associated with fever over 38.5 degrees, tachycardia, tachypnea, hypoxia, hypotension, oliguria, and impaired consciousness).
- Clear fluids or nothing by mouth (NPO), as ordered.
- Establish IV access and initiate infusion as per physician orders
- Maintain an accurate intake and output record
- Notify the obstetrician of any side effects of misoprostol
- Assess the uterine contractions Q15minutes:
    - Contraction frequency
    - Contraction duration
    - Contraction intensity -mild, moderate and strong (by palpation or by patient report)
    - Coping

  * The Goal is to establish regular painful contractions – notify the obstetrician if contractions are occurring greater than 3 in 10 minutes

- Additional doses of misoprostol should be deferred if uterine contractions are strong (strong by palpation or by patient report) and/or occurring greater than 3 contractions in 10 minutes
- Discuss with the patient pain relief options, including comfort measures and non-pharmacologic methods.
- Offer analgesia/sedation based on pain assessment and patients own preference.

Delivery:

- When delivery is imminent (patient feels an urge to push, reports feeling rectal pressure or presenting fetal part can be visualized) notify the obstetrician
- Provide continuous support to patient and support person/ family

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- Set-up the cot (+/- the cuddle cot apparatus as per the family's wishes) with a flannel blanket lined with blue pad (blue side up).

When the fetus has been delivered:

- The obstetrician will clamp the umbilical cord in two places and cut the umbilical cord with sterile scissors between the two cord clamps
- The obstetrician will actively manage the delivery of the placenta without providing traction on cord
- Collect fresh placental specimen for cytogenetic studies and swabs if ordered. Place the placenta in a clear plastic bag and label it with a patient label. Place bagged placenta in a brown paper bag. Ensure the pathology requisition is complete. The Unit Ward Aid or 24 hour porter needs to transport the placenta, with the requisition, to the lab.

Post Delivery:

Maternal Care:

- Initiate IV oxytocin as per Prescribers Orders
- Monitor vital signs, fundus and vaginal flow and urinary output
  - every 15 minutes for the first hour (total of 4 checks)
  - at 2 hours post delivery
  - More frequently if increased vaginal bleeding is noted or unstable vital signs
- Offer analgesia based on pain assessment and patient's own preference.

Care of the Infant:

- Wrap infant in an infant flannel blanket lined with blue pad (blue side up) and proceed as patient wishes, offer to collect mementoes See B-00-07-10020 and Appendix B

Prior to Discharge:

- If patient is Rh negative administer Rh immune globulin as per Prescriber's Orders
- If patient is rubella non-immune administer MMR vaccine as per Prescriber's Orders
- Ensure Social Work follow up
- Offer Pastoral Care services
- Educate about how to recognize complications including:
  - fever,
  - abdominal pain,
  - prolonged or excessive bleeding
- Ensure patient has follow up instructions re physician/midwife appointment

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- Ensure all relevant documentation is complete prior to discharge, including the "Maternity Centre Interdisciplinary Checklist for Families Experiencing Perinatal Loss" (See Appendix C)
- If patient declines mementos at time of discharge, give the mementos to the Social Worker

Patient/Family Education

Review with patient and support person:

- The rationale for and frequency of assessments
- How medication will be administrated
- The role of equipment and supplies related to assessments
- The possible side effects of misoprostol (encourage reporting of side effects to nursing staff)
- The process of labour and delivery
- The roles of the various health care team members
- Review discharge teaching including:
    - fever,
    - abdominal pain,
    - prolonged or excessive bleeding
    - breast care for suppressing lactation

Documentation:

- Medication Administration Record (MAR)
- Maternity Centre Interdisciplinary Checklist for Families Experiencing Perinatal Loss (see Appendix C)
- Interdisciplinary Progress Notes
- Fluid Balance Record
- 24 Hour Clinical Record Sheet
- Partogram

References:

1. Shannon, C., Winikoff, B. Misoprostol as a single agent for medical termination of pregnancy. From Up To Date (Last updated) July 28, 2014 – Accessed: May 24, 2017
2. Perinatal Services BC. (2017) Perinatal Mortality Guideline. Author: Accessed at www.perinatalservicesbc.ca June 26 2017
3. BCWH: Second Trimester Induction of Labour. Effective Date: October 21, 2013

4. J Durocher, J Bynum, W León, G Barrera, and B Winikoff. (2010) High fever following postpartum administration of sublingual misoprostol BJOG. Jun; 117(7): 845–852
5. Royal College of Obstetricians and Gynaecologists. (2012) Bacteria Sepsis in Pregnancy. Author. Green-top Guideline No. 64a, April

Persons/Groups Consulted:

Obstetrician Maternity Centre

Clinical Pharmacist – ICU/Maternity

RN Maternity Centre

Developed By:

RN, SCM Clinical Nurse Educator, Maternity

RN Clinical Nurse Specialist, Maternity

Revised By:

Social Worker Maternity Centre

Nurse Patient Educator

Approved By: Maternity Safety and Quality Council

Date of Creation/Review/Revision:

September 2012

Revised: August 2017

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Appendix A Pre Printed Order Set

IF YOU RECEIVED THIS FAX IN ERROR, PLEASE CALL 604-806-8886 IMMEDIATELY

PRESCRIBER'S ORDERS

NO DRUG WILL BE DISPENSED OR ADMINISTERED WITHOUT A COMPLETED **CAUTION SHEET**

ALLERGY/INTOLERANCE STATUS FORM (PHC-PH047)

DATE AND TIME	SECOND TRIMESTER INDUCTION OF LABOUR WITH misoprostol FOR FETAL DEMISE ORDERS (items with check boxes must be selected to be ordered) (Page 1 of 2)

ADMISSION INSTRUCTIONS: As per Interdisciplinary Guideline - Second Trimester Induction of Labour for Perinatal Loss

CODE STATUS: Do Not Attempt Resuscitation on FETUS

DIET: DAT until active labour
In active labour:
- ☐ Clear fluids
- ☐ When delivered keep NPO until delivery of placenta

ACTIVITY: As tolerated

CONSULTS:
- ☐ Obstetrical
- ☐ Anesthesiology
- ☐ Unit Social work
- ☐ Pastoral Care

MONITORING: As per Interdisciplinary Guideline - Second Trimester Induction of Labour for Perinatal Loss

INVESTIGATIONS:

Maternal:
- ☐ CBC, Type & Screen, Kleihauer
- ☐ TORCH Screen, Parvovirus B19
- ☐ HIV
- ☐ TSH, Hgb A1C
- ☐ Hemoglobin Electrophoresis (enter Hgb Electrophoresis on SCM)
- ☐ Coagulation Profile
- ☐ Gestational Hypertension (enter PIH on SCM)
- Thrombophilia Evaluation:
  - ☐ Factor V Leiden,
  - ☐ Prothrombin Gene Mutation
  - ☐ Protein C
  - ☐ Protein S
  - ☐ Antithrombin III
- Anti Phospholipid Antibodies:
  - ☐ Lupus Anticoagulant
  - ☐ Anticardiolipin Antibody
  - ☐ Beta 2 Glycoprotein
- ☐ Other:

Placental:
- ☐ Subamniotic swabs (swab between amnion and chorion) for aerobic and anaerobic culture if infection suspected
- ☐ Placenta and cord to pathology

Fetal:
- ☐ Complete appropriate documentation for embryo pathology or autopsy

Printed Name | Signature | College ID | Pager

Form No. PH503 (Sep 13-12)

ALL NEW ORDERS MUST BE FLAGGED

FAX COMPLETED ORDERS TO PHARMACY **PLACE ORIGINAL IN PATIENT'S CHART**

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Appendix B: Collection of Mementoes

Perinatal Loss

Note: Not all patients and families may wish to take mementoes upon discharge. Place all collected mementoes into an envelope, and give to the social worker. Mementos can be kept by the social worker for up to a year.

Mementos can include

- Handprints/ foot prints
- Lock of hair
- Photos – Nurse to call volunteer photographer from "Now I Lay Me Down To Sleep"
- Crib Card
- Beaded bracelet

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Appendix C – Interdisciplinary Checklist for Families Experiencing Perinatal Loss

Providence HEALTH CARE
St. Paul's Hospital

MATERNITY CENTRE
INTERDISCIPLINARY CHECKLIST
FOR FAMILIES EXPERIENCING PERINATAL LOSS

Date (D/M/Y)	**FAMILY** (Check appropriate box and initial when complete)	Initials	Comments
	Saw newborn at birth or afterward ☐ Mother ☐ Father ☐ Declined		
	Touched and/or held baby ☐ Mother ☐ Father ☐ Declined		
	Name given: _____ ☐ No name given		
	Photographs ☐ Accepted ☐ To Social Worker		
	Footprints/handprints ☐ Accepted ☐ To Social Worker		
	Lock of hair ☐ Accepted ☐ To Social Worker		
	ID Bands/Beads ☐ Accepted ☐ To Social Worker		
	Social Work Referral – Seen by: _____ ☐ Counseling and support provided ☐ Literature provided Cremation by: ☐ Privately ☐ Undecided Funeral arrangements made by: ☐ Mother/Father ☐ Undecided ☐ Other: _____		
	☐ Autopsy explained ☐ Autopsy Consent signed (PHC-MR095)		
	Community Health Liaison Nurse Referral ☐ Accepted ☐ Declined		
	Pastoral Care Referral: ☐ Accepted ☐ Declined		
	Newborn baptized: ☐ Yes, by: _____ ☐ No		
	Follow-up arranged:		

STILLBIRTH *(20 weeks or more and/or 500 grams or more)*			
Completed by	**ALL FORMS listed must be completed. Initial when complete**	**Initials**	**Send to**
RN/MD/RM	British Columbia Labour and Birth Summary Record (PSBC)		Chart
RN/MD/RM	British Columbia Newborn Record Part 1 (PSBC)		Chart
RN/MD/RM	Notice of A Live birth or Stillbirth (Vital Statistics) – obtain from 3MC		UC mail to Vital Statistics
MD/RM	Anatomic Pathology Autopsy Consultation Form (PHC-LA193)		Pathology, body to morgue
RN/UC	Notify Patient Placement of autopsy, using SCM function: Notification of Stillborn		SCM
MD/RM	Pathology Surgical Requisition (placenta) (PHC-LA124)		Pathology with placenta
RN/MD/RM	Registration of Stillbirth (Vital Statistics) – obtain from 3MC		Social Worker
MD/RM	Cytogenetics Laboratory Requisition (BC Children's & Women's– obtain form at www.elabhandbook.info)		Pathology with Surgical Pathology requisition

NEONATAL DEATH			
Completed by	**ALL FORMS listed must be completed. Initial when complete**	**Initials**	**Send to**
RN/MD/RM	British Columbia Labour and Birth Summary Record (PSBC)		Chart
RN/MD/RM	British Columbia Newborn Record Part 1 and 2 (PSBC)		Chart
RN/MD/RM	Notice of A Live birth or Stillbirth (Vital Statistics) – obtain from 3MC		UC mail to Vital Statistics
MD	Medical Certification of Death (Vital statistics) – obtain from 3MC		
MD/RM	Anatomic Pathology Autopsy Consultation (PHC-LA193)		Pathology, body to morgue
RN/UC	Notify Patient Placement of autopsy, using SCM function: Notification of Death		SCM
MD/RM	Pathology Surgical Requisition (placenta, if available) (PHC-LA124)		Pathology with placenta
MD/RM	Cytogenetics Laboratory Requisition (BC Children's & Women's– obtain form at www.elabhandbook.info)		Pathology with Surgical Pathology requisition

SPONTANEOUS ABORTION *(miscarriage, less than 20 weeks and/or under 500 grams)*			
Completed by	**ALL FORMS listed must be completed. Initial when complete**	**Initials**	**Send to**
MD/MW	Pathology Surgical Requisition (placenta and body) (PHC-LA124)		Pathology
RN/UC	Notify Patient Placement using SCM function: Miscarriage Communication Order		SCM
MD/RM	Embryopathology consultation Request (BC Children's & Women's– obtain form at www.elabhandbook.info) **(For less than 20 weeks only)**		Pathology with placenta and body

If you initial this form, you must complete the Interdisciplinary Signature Sheet at the front of the chart.

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Appendix D: Investigation and Assessment of Stillbirth Considerations in Stillbirth Evaluation and Care Checklist

1. At Diagnosis

☐ Review of all documentation relevant to current pregnancy:

- Antenatal Record, parts 1 and 2
- Laboratory investigations including serum screening
- Ultrasound(s)
- Past obstetrical history
- Medical history

☐ Laboratory:

- CBC, type/screen*
- Fete-maternal hemorrhage screen*
- Serology for CMV, toxoplasmosis, parvovirus 819, HSV, rubella (if not previously done)

☐ Discuss birth plan.

☐ Vaginal birth is preferable if there is no contraindication.

☐ Consider method of induction in light of clinical circumstances.

☐ Discuss role of autopsy (complete, limited or external exam only) and alternatives such as imaging.

☐ Discuss role of placental pathology.

☐ Offer grief support using appropriate resources.

2. At the Time of Delivery

☐ Examination of the stillborn: external exam by care giver, or specialist if available.

☐ Gross examination of placenta: weight, appearance, cord length and appearance, coiling ratio, particularly if placental pathology will not be done.

☐ Obtain informed consent/refusal for autopsy.

☐ Submit placenta for pathology.

☐ Cytogenetic studies (karyotype, FISH, CGH, microarray): newborn tissue, cord or placenta.*

☐ Additional laboratory testing based on clinical circumstances:

- Coagulation profile*
- Toxicology screen*
- Cultures of stillborn and placenta/amnion*

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- Thrombophilia testing
- Hemoglobinopathy screen if not already done
- HgbA1c
- Hypertensive disease labs

3. Post Partum Considerations

- ☐ Facilitate creation of memories, and seeing/holding the stillborn infant, if desired by parents.
- ☐ Arrange for follow up or referral, recognizing that autopsy and other investigation results may not be complete for up to 3 months.
- ☐ Provide information on contraception and prophylaxis before future conception.
- ☐ Offer advice on milk suppression or donation to the milk bank if requested.
- ☐ Discuss information on funeral arrangements and legal documents.

* These tests are time sensitive and should be performed as soon as possible.

From:

BC Perinatal Services Perinatal Mortality Guideline: