Preamble

One of the associated risks associated with childbirth is a postpartum hemorrhage. In the out-of-hospital setting, early intervention to manage a significant and ongoing hemorrhage can prevent further blood loss. Oxytocin helps contract uterine smooth muscle and minimizes further uterine blood loss.

Requirements

1. Fully licensed Technician-Paramedic.

2. Certification in postpartum hemorrhage protocol by the Medical Director.

3. Certification in administration of intramuscular (IM) medication by the Medical Director.

Indications

1. Patients at greater than 20 weeks gestation who have delivered a newborn in the out-of-hospital environment.

   and

2. Patients experiencing postpartum hemorrhage of greater than 500 ml blood.

Contraindications

1. Patient has not completed delivery of fetus(es).

2. Patient is less than 20 weeks gestation.
Drug Doses and Frequencies

oxytocin
- IM: 10 IU after the newborn has delivered
- IV: in the event of ongoing with significant blood loss, an additional 40 IU can be added to each 1000 ml normal saline and infused based on the severity of hemorrhage and patient response

Procedure

1. Perform patient assessment and record vital signs.
2. Assess that patient meets criteria for this protocol.
3. Ensure there are no contraindications to use of this protocol.
4. Initiate basic life support treatment measures, including supplemental oxygen.
   - these take precedence over management using this protocol
5. Initiate an intravenous line with normal saline
   - add oxytocin to the intravenous bag
   - infuse at a rate based on severity of hemorrhage and patient condition
6. Manage the hemorrhage as per appropriate guideline or protocol.
7. While basic life support treatment measures and intravenous line are being initiated, and hemorrhage is being controlled, obtain a focused obstetrical history. Include the following details:
   - antenatal care
   - expected delivery date
   - history of current pregnancy (including results of any ultrasounds)
   - history of prior pregnancies (including history of previous difficulties)
8. If baby (last baby), but not placenta, has delivered:
   - provide appropriate care for mother and newborn
   - give mother oxytocin IM
   - assist with delivery of placenta
   - manage complications, if possible, as per appropriate guideline or protocol
   - initiate transport to hospital
9. If the baby (last baby) and placenta have delivered:
   • provide appropriate care for mother and newborn
   • give mother oxytocin IM if not already done as part of step 8
   • manage complications, if possible, as per appropriate guideline or protocol
   • initiate transport to hospital

10. If possible, encourage mother to empty her bladder.

11. Massage the uterine fundus to promote uterine contraction and lessen the severity of the hemorrhage.

12. Repeat assessment, including vital signs, level of consciousness, oxygen saturation, and effect of oxytocin.

**Documentation Requirements**

The following information must be documented on the patient care report form:

1. Patient’s presenting signs and symptoms, including vital signs.
2. Indications for protocol use.
3. Details of patient’s obstetrical history and current delivery.
4. Dose, route, and time for each oxytocin dose used, and resulting clinical effects.
5. Repeat assessment and vital signs, as indicated.
6. Changes from baseline, if any, that occur during treatment or transport.
7. Signature and license number of EMS personnel performing any transfer of function skills.

**Certification Requirements**

1. Attend in-depth classes and lectures on obstetrics and obstetrical emergencies.
2. Demonstrate an understanding of the pharmacology, mechanism of action, and potential side effects of oxytocin.
3. Do an acceptable clinical rotation on a labour and delivery ward.
4. Pass a written examination.

5. Pass practical scenarios incorporating variations of the oxytocin – postpartum hemorrhage protocol.

6. Certification is by the Medical Director.

Recertification Requirements

1. Review class and recertification is done every 12 months.

2. A record will be kept to document all cases where this protocol is used.

Decertification

1. Decertification is at the discretion of the Medical Director or the Provincial Medical Director, Emergency Medical Services, Manitoba Health & Healthy Living.

Quality Assurance Requirements

1. Appropriate quality assurance policies must be in place. The Medical Director or designate must review all instances where this protocol is used. As a minimum, the following must be assessed:
   i) appropriateness of implementation
   ii) adherence to protocol
   iii) any deviation from the protocol
   iv) corrective measures taken, if indicated

2. Yearly statistics for protocol use compiled and forwarded to Emergency Medical Services, Manitoba Health & Healthy Living.