managing maternal hemorrhage

Vital Signs Normal vitals don't guarantee patient stability

- **Airway—intubate**
  - If inadequate ventilation or to assist airway protection

- **Breathing**
  - Supplemental O2, 5-7 L/min by tight face mask
  - to assist O2 carrying capacity

- **Circulation**
  - Pallor, delayed capillary refill and decreased urine output can indicate compromised blood volume without change in BP or HR.
  - Late signs of compromise are: decreased urine output, low BP and tachycardia.

Infusions

- **Start 2nd large bore (16 gauge or larger)**
- **RL or NS replaces blood loss at 3:1**
- **Volume expanders 1:1 (albumin, hetastarch, dextran)**
- **Transfusion (PRBC, Coagulation factors)**
- **Warm blood products and infusions to prevent hypothermia, coagulopathy and arrhythmias**

Medication for uterine atony

- **Oxytocin**
  - 10-40* units in 1 liter NS or RL IV rapid infusion
  - *30-40 units/liter most commonly used dose for hemorrhage

- **Methylergonovine (Methergine)**
  - 0.2 milligrams intramuscular q 2-4 hrs maximum 5 doses; avoid with hypertension

- **Prostaglandin F2 Alpha (Hemabate)**
  - 250 micrograms intramucosal, intramyometrial, repeat q 20-90 minutes, maximum 8 doses; avoid with asthma or hypertension

- **Prostaglandin E2 suppositories (Dinoprostone, Prostin E2)**
  - 20 milligrams per rectum q 2 hrs; avoid with hypotension

- **Misoprostol (Cytotec)**
  - 1000 micrograms per rectum or sublingual (ten 100 microgram tabs or five 200 microgram tabs)

- **Surgical interventions**
  - May be a life-saving measure and should not be delayed