

## OB Physiology

<b>Neuro</b> <ul style="list-style-type: none"> <li>Progressive ↓ MAC</li> <li>Decreased seizure threshold (estrogen)</li> </ul>	<b>GI</b> <ul style="list-style-type: none"> <li>Chronic "full stomach" (↓ LES tone, gastroparesis, stomach displacement)</li> </ul>
<b>Pulm</b> <ul style="list-style-type: none"> <li>↑ tidal volumes, smaller ↑ RR (progesterone) <i>Chronic respiratory alkalosis</i></li> <li>↓ FRC and ↑ VO<sub>2</sub> = rapid desaturation</li> </ul>	<b>Renal</b> <ul style="list-style-type: none"> <li>Increased Q → increased GFR (↓ Cr)</li> </ul>
<b>CV</b> <ul style="list-style-type: none"> <li>Expanded blood volume, ↑ HR → ↑ Q</li> <li>↓ SVR → Stable BP ←</li> <li>Aortocaval compression supine (&gt;20 wks)</li> <li>Massive auto-transfusion following delivery</li> </ul>	<b>Heme</b> <ul style="list-style-type: none"> <li>Dilutional anemia / thrombocytopenia</li> <li>Fibrinogen 400-600</li> <li>↑ coagulation factors</li> </ul>
	<b>Endocrine</b> <ul style="list-style-type: none"> <li>Human placental lactogen → insulin resistance</li> </ul>

## Postpartum Hemorrhage

### 1. Uterine atony

- Genital-tract trauma
- Uterine laceration
- Retained placenta
- Accreta spectrum
- Coagulopathy

{ Chorio  
 >G5, >4.5 g twins  
 Polyhydramnios  
 Mag/tocolytic  
 Prolonged pit }

<b>Oxytocin (Pitocin)</b>	30 U in 1L crystalloid	Bolus = hypotension *cardiac depressant/QTc
<b>Methylergonovine (Methergine)</b>	0.2 mg IM Q2-4H <i>X1 max</i>	CI'd in hypertension, PreE (vasoconstriction → stroke)
<b>Carboprost (Hemabate)</b>	0.25 mg IM Q15min <i>x2 max</i>	Bronchoconstriction
<b>Misoprostol (Cytotec)</b>	600-1000 mcg 1. Intrauterine 2. Buccal/rectal	Hyperthermia

Fibrinogen < 200 with bleeding = 100% PPV for severe PPH

## Medication Dosing

### C-section: Spinal

1.5 cc's 0.75% Bupi 2-3 hr  
 125 mcg IT Morph 18-24 hr  
 25 mcg IT Fent\*

### Labor Combined Spinal Epidural (CSE)

Intrathecal dose	Cervical Dilatation	Dose
	0-4 cm	25 mcg fent
	4-8 cm	0.5 cc 0.25% bupi + 25 mcg fent
	>8 cm	1 cc 0.25% bupi + 25 mcg fent

Epidural rate  
 • PIEB 5 cc q30 min + 5 cc Q10 demand

### Forceps Delivery

5 cc 3% chloroprocaine or  
 5 cc 2% lidocaine  
 + small additional boluses

### C-section: Epidural

~ 20 cc 3% 2-chloroprocaine\* 45-60 min  
 or  
 ~20 cc 2% Lidocaine\* 1-2 hr  
 +  
 4 mg PF morphine ~10 hr  
 +  
 Fentanyl 50-100 mcg  
 Speeds onset

### Labor Epidural Bolus

More spread  
 • 10-20 cc Bupi 0.125%  
 More density  
 • 5 cc aliquots Bupi 0.25%  
 50-100 mcg addnl fentanyl can increase density  
 Motor block → suspect IT catheter

### Post-Partum Tubal

Goal: high T4 level (peritoneal stimulation)  
 Epidural  
 • Dose like C/S  
 Spinal  
 • Dose like C/S

### Cervical Cerclage

Goal: T10-S4 level  
 Spinal:  
 • 1 cc 0.75% bupi + 15 mcg fentanyl + Mild sedation  
 UPRIGHT after spinal (for sacral spread)

\*Urgent: bolus 5 cc aliquots. Crash: bolus 20 cc's.

## Pre-Eclampsia

Dx: BP >140/90 x2 & >0.3 g protein/day or P:C > 0.3

### PreE with Severe Features

Severe hypertension	<ul style="list-style-type: none"> <li>SBP &gt; 160</li> <li>DBP &gt; 110</li> </ul>
CNS symptoms	<ul style="list-style-type: none"> <li>Persistent headache</li> <li>Visual changes</li> </ul>
Pulmonary edema	
Thrombocytopenia	<ul style="list-style-type: none"> <li>Plt &lt; 100</li> </ul>
Renal insufficiency	<ul style="list-style-type: none"> <li>Cr &gt; 1.1</li> <li>Doubling serum Cr</li> </ul>
Liver dysfunction	<ul style="list-style-type: none"> <li>Transaminitis 2x normal limit</li> </ul>

HELLP = PreE with marked liver inflammation, angiopathy

### PreE with Severe Features Management

#### Obstetric management

- Magnesium gtt
- Delivery > 34 wks (SF) and 37 wks (w/o SF)

#### Anesthetic management

- Check plts with epidural
- SBP < 160 (ICH risk)
- Judicious IVF (pulm edema)
- Difficult airway (edema)

Eclampsia Tx: 4-6 g Mag