

9 Hypotension

Unexplained drop in blood pressure refractory to initial treatment

START

- 1 Call for help and a code cart/defib.**
 - ▶ **Ask: “Who will be the crisis manager?”**
- 2 Check...**
 - ▶ Pulse
 - ▶ Blood pressure
 - ▶ Equipment
 - ▶ Heart rate
 - If BRADYCARDIA, go to ▷CHKLST 3
 - ▶ Rhythm
 - If VF/VT, go to ▷CHKLST 5
 - If PEA, go to ▷CHKLST 4
- 3 Run IV fluids wide open**
- 4 Give vasopressors and titrate to response**
 - ▶ MILD hypotension:
Give ephedrine or phenylephrine
 - ▶ SIGNIFICANT / REFRACTORY hypotension: Give epinephrine bolus, consider starting epinephrine infusion
- 5 Turn FiO₂ to 100% and turn down volatile anesthetics**
- 6 Inspect surgical field for bleeding**
 - If BLEEDING go to ▷CHKLST 8

- 7 Consider actions...**
 - ▶ Place patient in Trendelenberg position
 - ▶ Obtain additional IV access
 - ▶ Place arterial line

8 Consider causes...

Operative field

- Mechanical or surgical manipulation
- Insufflation during laparoscopy
- Retraction
- Vagal stimulation
- Vascular compression

Unaccounted blood loss

- Blood in suction canister
- Bloody sponges
- Blood on the floor
- Internal bleeding

Drugs / Allergy

- Anaphylaxis go to ▷CHKLST 2
- Recent drugs given (ACE/ARB?)
- Wrong drug/wrong dose
- Drugs used on the field (i.e., intravascular injection of local anesthetic drugs)
- Drug interaction

DRUG DOSES and treatments

Ephedrine:	5 – 25 mg IV, repeat as needed
Phenylephrine:	100 - 500 mcg IV, repeat as needed
Epinephrine:	• BOLUS: 5 -10 mcg IV • INFUSION: 0.1 -1.0 mcg/kg/min

Breathing

- Increased PEEP
- Hypoventilation
- Hypoxia go to ▷CHKLST 10
- Persistent hyperventilation
- Pneumothorax
- Pulmonary edema

Circulation

- Air embolism go to ▷CHKLST 1
- Bradycardia go to ▷CHKLST 3
- Malignant hyperthermia go to ▷CHKLST 11
- Tachycardia go to ▷CHKLST 12
- Bone cementing (methylmethacrylate effect)
- Myocardial ischemia go to ▷CHKLST 16
- Emboli (pulmonary, fat, septic, amniotic, CO₂)
 - Pulmonary Embolism, go to ▷CHKLST 21
- Severe sepsis
- Tamponade