

ER management for hemodynamically unstable patients (hypovolemic shock, tissue hypoxia)

Resuscitate with 4 lines:

- 2 large-bore 16-gauge IV lines – one for fluid bolus injection (Normal Saline, or Ringer's Lactate)
 - If patient is acidotic (i.e. after excessive diarrhea and bicarbonate loss), give Ringer's lactate (lactate is metabolized to bicarbonate in the blood)
 - If patient is alkalotic (i.e. after excessive vomiting and H⁺/Cl⁻ loss), give Normal Saline (to replenish lost Cl⁻)
- 3rd line – nasal prongs, feed them oxygen to prevent hypoxia.
- 4th line – foley catheter in urethra, monitor urine output
 - (easiest way to assess recovery of hemodynamic stability)

Draw blood for basic lab tests, consider basic investigations:

- If cardiac/respiratory issue:
 - ABGs – pH, pCO₂, pO₂, HCO₃⁻ (call respiratory tech)
 - CXR (portable), ECG 12-lead - STAT
- If losing blood:
 - Hematocrit, WBC count/diff, plt count - CBC
 - Coagulation ability – PT (INR), PTT
 - Prepare for transfusion – typing, screening, cross-matching
- Kidney function – creatinine, BUN, electrolytes
- Liver tissue integrity and function – AST, ALT, ALP, GGT; bilirubin, albumin, PT(INR)
- Electrolytes – K⁺, Na⁺, Cl⁻, H⁺, HCO₃⁻ (total CO₂) - see if everything is normal

→ **Transfuse only if necessary.**