COVID-19 Resources

Non-ICU Emergency Cards

Hypotension

Definition:
Systolic blood pressure <90 mm Hg, mean arterial pressure <65 mm Hg, or >30 mm Hg drop in systolic blood pressure from baseline

Differential diagnosis

Distributive
Signs:
- Warm extremities
- Febrile
- Wide pulse pressure
Causes:
- Sepsis
- Anaphylaxis
- Adrenal insufficiency
- Neurogenic (low heart rate)

Hypovolemic
Signs:
- Cold extremities
- Narrow pulse pressure
- Slow capillary refill
Causes:
- Hemorrhage
- Volume depletion

Obstructive
Signs:
- Cold extremities
- Jugular vein distension
- Muffled heart sounds
- Unilateral breath sounds
Causes:
- Pulmonary embolus
- Tension pneumothorax
- Cardiac tamponade
- Abdominal compartment syndrome

Cardiogenic
Signs:
- Cold extremities
- Jugular vein distension
- Rales
- Chest pain
- New arrhythmia/murmur
Causes:
- Pump failure (ischemia, cardiomyopathy)
- Arrhythmia
- Valvular disease
- Hypertrophic obstructive cardiomyopathy

Start

1. Establish team leader and call for HELP.
2. Check pulse and vital signs.
   - If pulseless, initiate Advanced Cardiovascular Life Support.
3. Obtain intravenous or intraosseous access.
4. Perform focused physical exam.
   - Mental status
   - Jugular venous pressure
   - Extremities (warm or cold, livedo)
   - Lung, cardiac, and abdominal exam
   - Urine output; consider urinary catheter
5. Perform focused history.
   - AMPLE: allergies, medications, past medical history, last meal, recent events
   - Consider sending senior member for electronic chart review
6. Consider further diagnostic testing.
   - Venous/arterial blood gases, complete blood count, basic metabolic panel, liver function tests, troponin, B-type natriuretic peptide
   - Chest radiograph
   - Electrocardiogram
   - Point-of-care ultrasound
     - Inferior vena cava
     - Right and left ventricular function
     - Pericardial fluid
     - Lower extremity venous compression
7. Treatment
   - First-line treatment is fluid bolus in almost all causes of hypotension
   - Consider vasopressors (norepinephrine preferred in most instances) IF desired blood pressure not reached after 2- to 3-L bolus