

SHOCK



- Occurs when the rate of arterial blood flow is inadequate to meet tissue metabolic needs
- Systolic blood pressure of 90 mm Hg or less or a MAP of less than 60 mm Hg



TYPES



- Hypovolemic (Traumatic, GI bleed, Vomiting, Diarrhea)
- Cardiogenic (M.I, Decompensated valvular lesions)
- Obstructive (Tension pneumothorax, Massive P.E)
- Distributive/Vasodilatory (Sepsis, Anaphylaxis, Neurogenic)

End result of any type of shock is multi-organ failure



CLINICAL FINDINGS

- Reduced urine output
- Skin mottling
- Altered sensorium
- Thready low volume pulse
- Tachypnea
- Tachycardia
- Prolonged capillary refill time
- Cold clammy extremities (in all shock except distributive)



INVESTIGATION

- CBC
- ESR, CRP, Procalcitonin
- RFT, Serum electrolytes
- RBS
- ABG
- ECG
- Echocardiography
- Blood culture
- Specific work up - eg: Pulmonary embolism



TREATMENT



- Airway, Breathing, Circulation
- Placement of central venous catheter - fluids & medications

Central venous pressure < 5 mm Hg - Hypovolemia

> 18 mm Hg - Volume overload

- POCUS IVC Diameter



- Hemorrhage - PRBC/Whole blood
- Dehydration - Isotonic crystalloids
- Cardiogenic shock - Norepinephrine. Can add Dobutamine
- Distributive shock - Norepinephrine



Anaphylactic shock - Epinephrine

- Septic shock - Norepinephrine

Target MAP > 65 mmHg





- Septic shock - Empiric broad spectrum antibiotics
- Pulmonary embolism - Intravenous thrombolysis
- Myocardial infarction - PCI/Thrombolysis
- Tension Pneumothorax - Needle decompression
- Adrenal insufficiency - Corticosteroids

