Shock patients may deteriorate rapidly. Signs of poor perfusion include cool mottled skin, diminished pulses, altered mental status, increased capillary refill time (greater than 3 seconds), tachycardia AND systolic BP less than 90 mm/hg.

**TREATMENT**

- Place patient in supine position with legs elevated
- Maintain body warmth
- **Airway/breathing management**
  - Monitor SpO₂
  - Administer O₂ via proper adjunct to maintain oxygen saturation of 95% or greater
- Determine Blood Glucose Level
- **Initiate cardiac monitoring**
  - Record and evaluate 12 Lead ECG strip
- Establish IV/IO access
  - 20 ml/kg normal saline; max 2L
  - If IO used for access, the humerus is the preferred site
    - Monitor for evidence of fluid overload
- If hypotensive after fluid administration, administer **one of the following**:
  - Dopamine 5-10 mcg/kg/min IV/IO and titrate to systolic BP of 90 mmHg
    - **Contraindications**
      - Hypovolemic shock
      - Tachydysrhythmias
    - **Precautions**
      - Patients receiving monoamine oxidase inhibitors
  - Epinephrine Drip at 2-10 mcg/min
    - 1mg (1:1000) Epinephrine mixed in 100cc normal saline
- For patients confirmed to have Acute Adrenal Insufficiency by either the presence of a medical alert bracelet, designation of medical records, or patient, family or medical confirmation
  - Assist with administration of patient’s **Solu-Cortef** if present
    - If Solu-Cortef not available, **Solu-Medrol 125 mg** slow IV push
- Assess temperature
  - If patient is febrile apply cooling measures
- Look for underlying causes
Intubation of the patient should only occur if the patient is in severe respiratory failure (i.e. can't adequately oxygenate or ventilate) that is refractory to medical management, respirations less than 10/min or greater than 40/min, or a decreased level of consciousness

- **Orotracheal Intubation**
  - Administer **Ketamine 2 mg/kg IV/IO**
  - Consider use of the bougie (Appendix I) when the laryngeal inlet cannot be completely visualized
  - **Confirm tube placement and constantly monitor adequacy of ventilations by:**
    - Record and monitor waveform capnography (Appendix F)
    - EtCO₂ monitoring (numerical and waveform)
    - Normal readings are 35-45 mmHg
    - Expect higher values and use controlled hyperventilation to reduce
    - Absence of gastric sounds with auscultation
    - Auscultating for the presence of bilateral breath sounds
    - Look for equal chest rise
  - Administer **Midazolam in 2 - 5 mg** increments IV/IO to maintain sedation, may repeat once in 10 minutes
    - Greater than 64 years old, administer in 2 mg increments
  - **Contraindication**
    - Intolerance to benzodiazepines
    - Hypotension
  - **Precaution**
    - May cause hypotension
  - If unable to intubate patient after two attempts
    - Insert supra-glottic airway (Appendix D)
Adrenal insufficiency or Addison's disease is an endocrine disorder that occurs when the adrenal glands do not produce sufficient amounts of cortisol and other glucocorticoid hormones needed to respond to stress and inflammatory reactions and needed to re-establish homeostasis after a stress response.

Early signs and symptoms of patients in acute adrenal crisis include pallor, dizziness, headache, weakness/lethargy, abdominal pain, nausea/vomiting and hypoglycemia. If left untreated, symptoms may progress to hypotension, shock, seizures and eventual heart failure.

**TREATMENT**

- Airway/breathing management
  - Administer O₂ via proper adjunct to maintain oxygen saturation of 95% or greater

- Initiate cardiac monitoring;
  - Record and evaluate 12 lead ECG strip

- Establish IV Access
  - If indicated (i.e. tachycardia, hypotension), 20 ml/kg normal saline to maintain systolic BP of 90 mmHg.
  - Monitor for evidence of fluid overload

- Determine Blood Glucose Level

- Assess temperature

- Treatment based on identification, assessment and patient's level of distress

  - For patient's confirmed to have Acute Adrenal Insufficiency by either the presence of a medical alert bracelet, designation of medical records or other patient, family or medical confirmation.
    - Assist with administration of patient's Solu-Cortef if present
    - If Solu-Cortef not available, administer Solu-Medrol 125 mg slow IV push