

SHOCK – PEDIATRIC

APPROVED:



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DATE:

February 2014

Information Needed:

- Shock in children may be subtle and difficult to recognize. Tachycardia may be the only sign noted. Hypotension is a late sign of shock
- Determining a blood pressure may be difficult and readings may be inaccurate in children under 3 years of age
- History of onset of symptoms, duration, fluid loss (nausea, vomiting, diarrhea), fever, infection, trauma, ingestion or history of allergic reaction, past history of cardiac disease or rhythm disturbances, decrease in urinary output (dry diapers).
- Utilize the Broselow Tape to measure length and then SMC Pediatric Reference Card for determination of drug dosages, fluid volumes, defibrillation/cardioversion joules and appropriate equipment sizes.

Objective Findings:

- **Compensated Shock**
 - Anxiety, agitation, restlessness
 - Tachycardia
 - Normotensive
 - Capillary refill normal to delayed
 - Dry mucous membranes
- **Decompensated Shock**
 - Decreased level of consciousness
 - Tachycardia to bradycardia
 - Hypotensive
 - Peripheral cyanosis
 - Delayed capillary refill
 - Inequality of central and distal pulses
 - Dry mucous membranes

General Treatment:

- Routine medical care; ensure need for c-spine precautions if trauma suspected.

- Ensure ABC's, oxygenation, ventilation; suction as needed
- Oxygen via blow-by, mask, or high flow as needed; assist ventilations with BVM as needed.
- Control external bleeding, shock position, as needed
- Keep child warm
- Establish IV/IO access
- Check blood glucose for patients with altered mental status
 - If neonate (less than 29 days) and blood glucose less than 40 mg/dL give:
 - D_{10%}W IV/IO
 - If no vascular access, administer glucagon IM
 - If older than 29 days and blood glucose less than 60 mg/dL give:
 - D_{10%}W IV/IO
 - If no vascular access, administer glucagon IM

Hypovolemia

- Give IV/IO fluid bolus of NS. Reassess. May repeat twice as indicated. Contact Pediatric Base Hospital Physician for additional fluid orders
- If known or suspected trauma, see Trauma Evaluation and Management Protocol

Distributive Shock

- Give IV/IO fluid bolus of NS. Reassess. May repeat twice as needed. Contact Pediatric Base Hospital Physician for additional fluid orders.
- If anaphylaxis is suspected, see Pediatric Allergic Reaction Protocol
- Treat rhythm disturbances if symptomatic

Cardiogenic Shock

- If indicated, go to appropriate Dysrhythmia Protocol
- If tachydysrhythmic or bradydysrhythmic:
 - Give IV/IO fluid bolus of NS. Reassess. May repeat twice as needed. Contact Pediatric Base Hospital Physician for additional fluid orders.

Precautions and Comments:

- Suspect non-accidental injury when physical findings are inconsistent with the history
- Remember reporting requirements for suspected non-accidental injury