

BB. NON-TRAUMATIC SHOCK: HYPOPERFUSION

1. Initiate General Patient Care.

2. Presentation

The body responds in various ways to a state of inadequate blood flow to meet the oxygen demands of the cells. A patient may exhibit an altered mental status; cool, clammy skin; diaphoresis; dilated pupils; a rapid, weak pulse; shallow, labored respirations; general weakness; and/or a decreasing pulse pressure.




3. Treatment


a) Continue General Patient Care.




b) Establish IV access with LR.

(1) If lungs are clear, administer fluid bolus.
20 mL/kg of LR IV
Titrate to a systolic pressure of 100 mmHg.

(2) If rales are present, administer fluid bolus.
Maximum of 250 mL of LR IV
Titrate to a systolic pressure of 100 mmHg.
 More fluid requires medical consultation.

c)  Consider dopamine (2–20 **mcg**/kg/min).
Titrate to a systolic pressure of 100 mmHg.

d)  Consider additional fluid administration.
Maximum Dose 2,000 mL without medical consultation.

BB. NON-TRAUMATIC SHOCK: HYPOPERFUSION (Continued)



- e) The pediatric patient may present hemodynamically unstable or with hypoperfusion evidenced by hypotension and signs such as altered mental status, delayed capillary refill greater than 2 seconds, pallor, and/or peripheral cyanosis. Hypotension is defined as a systolic blood pressure less than 60 in neonates (patients birth to 28 days of age), less than 70 in infants (patients less than 1 year of age), less than $[70 + (2 \times \text{years}) = \text{systolic BP}]$ for patients greater than 1 year of age.

- f)  Continue General Patient Care.




- g) Establish IV/IO access with LR.


If age-related vital signs and patient's condition indicate hypoperfusion, administer initial fluid bolus of 20 mL/kg LR IV/IO. If patient's condition does not improve, administer the second bolus of fluid at 20 mL/kg LR IV/IO.

OR

For volume-sensitive children administer initial fluid bolus of 10 mL/kg LR IV/IO. If patient's condition does not improve, administer the second bolus of fluid at 10 mL/kg LR IV/IO.

Volume-sensitive children include: neonates (birth to 28 days), children with congenital heart disease, chronic lung disease, or chronic renal failure.

- h)  Third and subsequent fluid boluses at 20 mL/kg IV/IO.

- i)  Consider dopamine.
2–20 **mcg**/kg/min IVP/IO
Titrate to age-specific vital signs.

4. Continue General Patient Care.