Fluid and Vasoactive-Inotrope Management Algorithm For Children



Healthcare Systems
WITH Intensive Care



Healthcare Systems
WITHOUT Intensive Care

Abnormal Perfusion with or without Hypotension

- If signs of fluid overload are absent, administer fluid bolus, 10-20 mL/kg.
- Repeat assessment of hemodynamic response to fluid and consider fluid boluses, 10-20 mL/kg, until shock resolves or signs of fluid overload develop.
- Assess cardiac function.
- Consider epinephrine
 if there is myocardial
 dysfunction or epinephrine/
 norepinephrine if shock
 persists after 40-60 mL/
 kg (or sooner if signs of
 fluid overload develop).

Abnormal perfusion WITHOUT hypotension

- Do NOT give fluid bolus unless there are signs of dehydration with ongoing fluid losses (eg, diarrhea).
- Start maintenance fluids.
- Monitor hemodynamics closely.
- Consider vasoactiveinotropic support (if available).

Abnormal perfusion WITH hypotension*

- If signs of fluid overload are absent, administer fluid bolus, 10-20 mL/kg.
- Assess hemodynamic response to fluid and repeat fluid boluses, 10-20 mL/kg, until hypotension resolves or signs of fluid overload develop.
- Assess cardiac function (if available)
- Consider epinephrine/ norepinephrine if hypotension persists after 40 mL/kg or sooner if signs of fluid overload develop.

Fluid in mL/kg should be dosed as ideal body weight.

Shock resolved, perfusion improved

- Do not give more fluid boluses.
- Consider maintenance fluids.
- Monitor for signs/symptoms of recurrent shock.

*Hypotension in healthcare systems WITHOUT intensive care is defined as either: SBP < 50 mm Hg in children aged < 12 months SBP < 60 mm Hg in children aged 1 to 5 years SBP < 70 mm Hg in children aged > 5 years

OR

Presence of all 3 World Health Organization criteria: cold extremities, prolonged capillary refill > 3 seconds, weak/fast pulse

www.sccm.org/SurvivingSepsisCampaign/Guidelines/Pediatric-Patients

