

Cheetah Medical™ Education presents — FAST FLUID FACTS



CAN TOO MUCH FLUID HARM MY PATIENT?

by Sarah Mobley, RN

It seems well understood that not enough fluid can result in tissue hypoperfusion and cause damage to vital organs, but too much fluid can also cause damage.

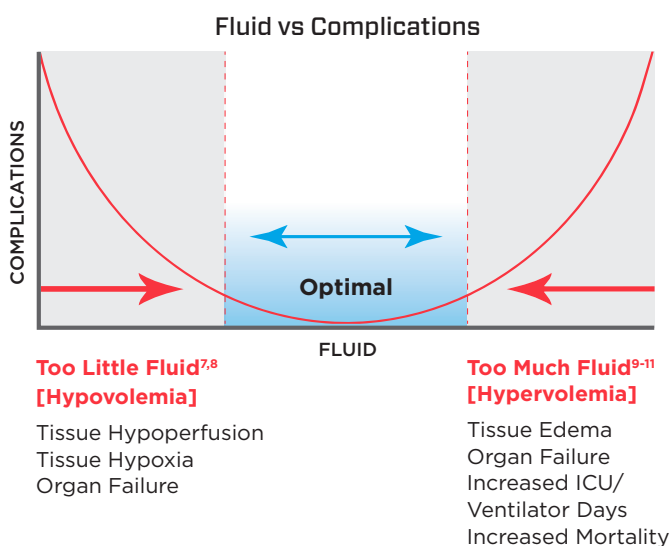
Both over and under resuscitation has been linked to suboptimal outcomes for patients.

In addition to lung and kidney injury,¹ fluid overload has been found to increase the need for fluid-related medical interventions.² It is independently associated with both the inability to ambulate on hospital discharge, and discharge to a healthcare facility instead of home.³

Fluid overload places patients at a higher risk for hospital mortality and is considered to be an **independent** risk factor for mortality.⁴

That’s a lot to consider when you think about how often patients are given IV fluids!

IV fluids are drugs and should be dosed according to patient response.



Therefore, remember to always ask, “Will my patient benefit from IV fluid administration?”

Testing fluid responsiveness before you treat may lead to shortened time on vasopressors and less time in the ICU, as well as decreased need for mechanical ventilation and for hemodialysis⁵.

And remember, only ~50% of hemodynamically unstable patients will respond to fluids.⁶ If your patient is not fluid responsive, this should raise questions about the value of further fluid.

cheetah-medical.com

1. Shin et al. Effects of intraoperative fluid management on postoperative outcomes: A hospital registry study; Annals of Surgery 2017 March 10; Epub ahead of print. 2. Kelm et al. Fluid overload in patients with severe sepsis and septic shock treated with early goal directed therapy is associated with increased acute need for fluid related medical interventions and hospital death. Shock 2015; 43(1): 68-73. 3. Mitchell, KH et al. Volume Overload: Prevalence, Risk Factors, and Functional Outcome in Survivors of Septic Shock. Ann Am Thorac Soc 2015;12: 1837-1844. 4. Marik P et al. Fluid administration in severe sepsis and septic shock, patterns and outcomes: an analysis of a large national database. Intensive Care Med 2017; 43:625-632. 5. Latham et al. Stroke volume guided resuscitation in severe sepsis and septic shock improves outcome. Journal of Critical Care 2017; 42: 42-46. 6. Bentzer et al. Will This Hemodynamically Unstable Patient Respond to a Bolus of Intravenous Fluids? JAMA 2016; 316:1298-1309. 7. Rivers E et al. Early goal directed therapy in the treatment of severe sepsis and septic shock. NEJM 2001; 345: 1368-1377. 8. Mouncey PR. Trial of Early, Goal-Directed Resuscitation for Septic Shock. N Engl J Med 2015;372:1301-1311. 9. Kelm et al (2015)-Fluid overload in patients with severe sepsis and septic shock treated with early goal directed therapy is associated with increased acute need for fluid-related medical interventions and hospital death. Shock 43: 68-73 10. Boyd J et al. Vasopressin in Septic Shock Trial (VASST). Critical Care Medicine 2011; 39:259-265. 11. Vincent JL et al. Sepsis in European ICU: Results of the SOAP Study. Critical Care Med 2006; 34:344-353.



For questions, comments, or what you’d like to see in another edition, email us at socialmedia@cheetah-medical.com

We LOVE hearing from you!

