

“We summarized the emerging new literature regarding the pathophysiological principles underlying the beneficial and deleterious effects of fluid administration during resuscitation” Lira and Pinsky (2014).

Reference:

Lira, A. and Pinsky, M.R. (2014) Choices in fluid type and volume during resuscitation: impact on patient outcomes. *Annals of Intensive Care*. 4, p.38.

Type and volume of intravenous fluid required during resuscitation [@ivteam #ivteam](http://ctt.ec/_f1aU+)

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Abstract (provisional):

We summarized the emerging new literature regarding the pathophysiological principles underlying the beneficial and deleterious effects of fluid administration during resuscitation, as well as current recommendations and recent clinical evidence regarding specific colloids and crystalloids. This systematic review allows us to conclude that there is no clear benefit associated with the use of colloids compared to crystalloids and no evidence to support the unique benefit of albumin as a resuscitation fluid. Hydroxyethyl starch use has been associated with increased acute kidney injury (AKI) and use of renal replacement therapy. Other synthetic colloids (dextran and gelatins) though not well studied do not appear superior to crystalloids. Normal saline (NS) use is associated with hyperchloremic metabolic acidosis and increased risk of AKI. This risk is decreased when balanced salt solutions are used. Balanced crystalloid solutions have shown no harmful effects, and there is evidence for benefit over NS. Finally, fluid resuscitation should be applied in a goal-directed manner and targeted to physiologic needs of individual patients. The evidence supports use of fluids in volume-responsive patients whose end-organ perfusion parameters have not been met.

Full Text

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