



Letter to the Editor

Making sense of ERAS elements

Keywords:

ERAS
Stroke volume index
Volume optimization

Dear Editor,

We would like to congratulate Dr. Takagi and colleagues [1] for not only completing an RCT involving a complex patient population, but for including an all too often forgotten component of patient care, their experience. We would like to address a few concerns.

First and foremost, static indices, such as SVI, should not be used to guide fluid therapy as they lack the ability to determine fluid responsiveness [2]. From the perspective of functional hemodynamic monitoring, some assessment of the need to augment perfusion in addition to a 10% or greater change in SVI should be used to determine whether fluid administration is warranted [3]. SVI in the absence of a fluid challenge should not be used to gauge fluid administration. Did the authors consider measuring the adequacy of perfusion such as acid-base status to determine if fluid was required?

Second, vasopressor agents, such as phenylephrine and ephedrine as employed within the study algorithm, are well known to enhance central volume without changing total intravascular volume. Additionally, in a dose dependent fashion, vasopressors may augment SVI as a function of venous redistribution from venous lakes, such as the splanchnic reservoir, or they may decrease SVI depending upon their relative tone inducing affects. Either way, determination of fluid administration in this setting becomes very difficult even when the correct methods of determining volume need are employed [4,5].

Third, though patient weights were not presented within the article, the 7 ml/kg/h difference in fluid administration between groups is considerable and alone may be responsible for the significant difference in fluid administration between groups.

Declaration of conflicts

Neither Joshua Bloomstone, MD, MSc, FASA nor Jonathan Katz, MD have any financial conflicts of interest relative to this editorial letter.

References

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