

Accepted Manuscript

Rebuttal From Dr Kory

Pierre Kory, MPA, MD

PII: S0012-3692(16)62456-X

DOI: [10.1016/j.chest.2016.11.020](https://doi.org/10.1016/j.chest.2016.11.020)

Reference: CHEST 828

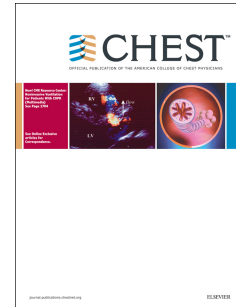
To appear in: *CHEST*

Received Date: 8 November 2016

Accepted Date: 8 November 2016

Please cite this article as: Kory P, Rebuttal From Dr Kory, *CHEST* (2016), doi: [10.1016/j.chest.2016.11.020](https://doi.org/10.1016/j.chest.2016.11.020).

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.



Rebuttal From Dr Kory

Pierre Kory, MPA, MD
Medical Director, Trauma and Life Support Center
Chief, Critical Care Service
Associate Professor, CHS
University of Wisconsin School of Medicine and Public Health
Madison, WI
Email: pkory@wisc.edu

Dr. Kory received a stipend from Sonosite/Fujifilm to provide a video based tutorial based on how to diagnose a deep vein thrombosis using ultrasound.

I appreciate and commend Dr. Schmidt's succinct review (1) of the physiology underlying cardiac filling and output. He accurately observes that IVC *distention* has a strong correlation with FR. He neglects to mention, however, that IVC *distention* is found in such rare circumstances, it could never serve as the primary guide to fluid resuscitation unless we heavily sedated, paralyzed, and overinflated our intubated patients, an approach violating some of the most beneficial patient care practices we know of today (i.e. low tidal volume ventilation, avoiding delirium, and increasing mobility).(2) Thus, the debate rests almost entirely on the predictive merits of the most common respiration-phasic IVC variation encountered, that of IVC *collapse*.

IVC Collapse

Several of Dr. Schmidt's physiologic observations on IVC collapse were identical to those I cited in arguing *against* its utility to guide fluid resuscitation; 1) that IVC collapse results from spontaneous respiratory effort and 2) that the magnitude of IVC collapse is almost entirely conditioned by the magnitude of respiratory effort and the level of right atrial pressure (RAP). This is precisely the crux of my argument – the amount of IVC collapse (that he provided instruction in measuring) provides no guidance to answering fluid needs given that; 1) depth of respiratory effort is a physiologic parameter clearly independent of fluid status and 2) “right sided” pressures have been proven of little utility in predicting FR. I again want to emphasize that the erroneous equating of low RAP (i.e. small IVC) with hypovolemia will persist unless we understand that low RAP in shock patients most commonly results from vasoplegia and hypercontractile heart function, two physiologic processes that only incompletely respond to fluid. The frequent “incomplete responses” encountered in low RAP is precisely why a better guide to fluid decisions is needed!

The above physiology strongly brings into question his statement that “ Δ IVC during spontaneous breathing predicts fluid-responsiveness with an odds ratio of 13.2”. To be fair, Dr. Schmidt admits that “this predictive ability is less than in passively ventilated patients” and that “spontaneously breathing patients is Δ IVC's weakest link.” Given the conflicting nature of these statements, a more specific analysis of the cited evidence is warranted.

Download English Version:

<https://daneshyari.com/en/article/5600992>

Download Persian Version:

<https://daneshyari.com/article/5600992>

[Daneshyari.com](https://daneshyari.com)