

Letter to the Editor

PRE-EJECTION PERIOD, CONTRACTILITY AND PRELOAD. A FASCINATING RIDDLE

Karim Bendjelid, MD, MS

Bendjelid K. Pre-ejection period, contractility and preload. A fascinating riddle.

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We read with great interest the study by Chan and collaborators regarding change in pre-ejection period (PEP) during progressive central hypovolemia [1]. We take the opportunity to add some comments that puts forward the potential value of pre-ejection period in detecting patients who may benefit from volume loading, in regards to our recent studies [2, 3]. The comments provided were appreciated and in some measure correct. However, in the discussion paragraph, Chan et al. [1] stated that PEP may be less sensitive to volume change as the degree of hypovolemia become more severe. This declaration is true but in this paper the explanations are quite a lot of. Indeed, there is only one reason to explain this observation: severe hypovolemia increases adrenergic stimulation which enhance contractility and decrease PEP [4, 5]. The concomitant increase in PEP regarding the decrease in preload and the reduction in PEP following the enhancement in contractility result in no significant change in PEP. This discussion reminds us that preload pathophysiology is fascinating but not simple.

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From the Intensive Care Division, University Hospital of Geneva, Geneva 14 1211, Switzerland.

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Address correspondence to K. Bendjelid, Médecin Adjoint Agrégé, Intensive Care Division, University Hospital of Geneva, Geneva 14 1211, Switzerland.

E-mail: karim.bendjelid@hcuge.ch