Modelling Haemorrhagic Shock

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Abstract

In the ongoing development of new approaches to mitigate the consequences of penetrating trauma in humans, particularly in the area of civil defense and military operations, possible strategies aimed at monitoring the state and at minimizing the risk of the wounded victims also depend on an in-depth, quantitative understanding of the compensation mechanisms at play. In the present work, time-honored and recent mathematical models of the dynamical response to hemorrhage are compared and their applicability to real-life situations is examined. New types of representation are explored and conclusions are drawn as to the most promising feasible approaches to a formalization of this problem.

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