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**Volume Kinetic (VK) shocks or Volumetric Overload Shocks (VOS) in clinical practice.****Ahmed N. Ghanem<sup>1</sup>, Nisha Pindoria<sup>2</sup>, Khalid A. Ghanem<sup>3</sup> and Salma A. Ghanem<sup>4\*</sup>**<sup>1</sup>*Retired Consultant Urologist & Independent Investigator, Mansoura University, Faculty of Medicine, United Kingdom*<sup>2</sup>*North Middlesex University Hospital, Sterling Way, London*<sup>3</sup>*Mansoura University Hospital, Mansoura, Egypt*<sup>4</sup>*Royal London Hospital, London*

Volume kinetic (VK) shocks are cardiovascular shocks induced by acute substantial volume changes of the cardiovascular system in either direction by decrease or increase. A decrease in cardiovascular volume induces the long established and well-known hypovolemic and haemorrhagic shocks. Cardiovascular shocks induced by volumetric overload (VO) have been recently reported. Volume kinetic (VK) shocks or Volumetric Overload Shocks (VOS) are common iatrogenic complication of fluid therapy in hospitals that is overlooked and underestimated. It may present in theatre as cardiopulmonary arrest or later with coma and acute respiratory distress syndrome (ARDS). VOS is 2 types: VOS1 and VOS2. VOS1 is induced by 3.5-5 L of sodium-free fluid and is characterized with dilution HN that has 2 nadirs and 2 paradoxes, is most dynamic and illusive and currently has a lifesaving therapy of 5%NaCl or 8.4%NaCo3. VOS2 may complicate VOS1 or occur de novo complicating sodium-based fluid therapy during resuscitation of shock, acutely ill patients, and prolonged surgery. It has no obvious serological markers or none. Between 3-10 L of sodium-based fluids induce VOS 2, and 12-14 L cause mortality. Many errors and misconceptions mislead physicians into giving too much fluid for resuscitation due to faulty rules on fluid therapy dictated by the wrong Starling's law. The correct replacement for this law is the hydrodynamic of the porous orifice (G) tube. These scientific discoveries should make the Medical World wake up and pay attention.

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