Determining the usefulness of fluid challenge

Kanishka Indraratna

Sri Jayewardenepura General Hospital, Sri Lanka

Fluid challenges are the first line of management in hypoperfusion, and low cardiac output situations. Some of these situations can be associated with left and right ventricular dysfunction, which would impair the hearts ability to handle the volume given. Traditional methods of volume measurement such as central venous pressure, pulmonary capillary wedge pressure, cannot assess whether there is a volume deficit, volume over load or normo volaemia. These measurements also cannot assess whether the patient can increase the cardiac output in response to a fluid challenge. Volume assessment can be done by measurement of the change in diameter of the superior vena cave during ventilation. To assess whether the cardiac output will increase in response to a fluid challenge, it is necessary to assess stroke volume variation, systolic blood pressure variation or pulse pressure variation in mechanically ventilated patients. When these are not possible passive leg rising is an alternative.

Biography

Kanishka Indraratna is Consultant Anaesthesiologist at Sri Jayewardenepura General Hospital, Sri Lanka. This is a multi disciplinary, teaching hospital with over 1001 acute beds. Dr. Indraratna graduated from the University of Colombo, Sri Lanka. He has obtained the MD (Anaesthesia) from Sri Lanka and the FFARCSI and FRCA. He underwent post graduate training in Anaesthesia in the UK. He also worked as a long term Locum Consultant Anaesthesiologist in the UK for 2 years. His special interests are Cardiac anaesthesia, Neuro anaesthesia and Intensive care.

kindraratna@yahoo.com