Use of anesthesia simulator

Résumé / Abstract

Medical Simulators are devices, which reproduce various aspects of human anatomy, physiology, disease states, or situations, which affect the care of patients. They are designed for the purpose of training healthcare students and professionals, or alternatively, to facilitate research and the development of new technologies (monitoring...). Anesthesia, with its complex, high risk, dynamic work environment, provides an ideal setting for simulation training. High-fidelity patient simulators are mannequins which are controlled by computers. An electromechanical cart acts as an Interface between the computer software programming and the actual behaviour of the patient mannequin. The mannequin's normal vital functions can be modified to reproduce the effects of various physiological states like exercise, stress, sleep... Alternatively, a broad range of disease states can be manifested. These simulators can be programmed to exhibit the effects of a number of complications associated with medical treatment and drug administration. In addition, a number of procedures can be performed and the patient's response will indicate the success of the procedure.