Hemorrhage Control and Resuscitation

Extracorporeal Membrane Oxygenation: Comprehensive Adult Extracorporeal Support Program

Extracorporeal membrane oxygenation represents a form of cardiopulmonary bypass that can be maintained outside the operating room and allows for the delivery of oxygenated blood to peripheral tissue beds over days to weeks, or even months. Early trials evaluating the potential benefits for adults in respiratory failure failed to show a benefit over standard therapy. However, subsequent improvements in gas exchange membranes, pump technology, cannulation catheters and techniques, and circuit management have made this previously cumbersome and complication-prone therapy rather more universally applicable. The purpose of this USAF-sponsored study is to prospectively collect data on critically ill adult patients referred for possible extracorporeal membrane oxygenation support in a standard registry. The data will be analyzed on a case-by-case basis for performance improvement and quality assurance. For those patients who actually require extracorporeal membrane oxygenation, data will be submitted to the Extracorporeal Life Support Organization for inclusion in their national registry. The project was moved to sustainment at the San Antonio Military Medical Center and has transitioned to a program.