



Mechanical Circulatory Support during Cardiopulmonary Resuscitation

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Abstract:

Sudden cardiac death represents the first cause of death in the Western countries and accounts for approximately one million deaths per year. Cardiopulmonary resuscitation (CPR) has been used for more than 50 years in an attempt to intervene in this process. However the outcome from cardiac arrest remains poor, even when the arrest occurs in hospitals, where well trained personnel and necessary equipment are readily available. Well perfused myocardium seems to recover more easily during the resuscitation process and it is well documented that maintenance of adequate coronary perfusion pressure during CPR produces increased rates of return of spontaneous circulation (ROSC). Mechanical circulatory support to improve prognosis of cardiac arrest has been extensively studied but the results are still conflicting. We hereby present the rationale behind the use of mechanical support devices in the resuscitation process including the impedance threshold device, the mechanical chest compression devices and the extracorporeal CPR modality to improve outcomes of cardiac arrest.

Biography:

I received my medical degree from Patras University Medical School, Greece, in 1984. I completed a Residency in Internal Medicine at Salem Hospital, Salem, Massachusetts and a Clinical and Research Fellowship in Pulmonary and Critical Care Medicine at Massachusetts General Hospital, Harvard University Medical School, USA. I obtained a PhD title from Patras University Medical School. Since 1993 I work in Onassis Cardiac Surgery



ICU and Pulmonary Services, as an Associate Director for 12 years and as Director for the last 7 years. I am actively involved in Cardiopulmonary Resuscitation, as an Instructor of the European Resuscitation Council and a member of the Board of Directors of the Hellenic Society of Cardiopulmonary Resuscitation

Recent Publications:

- Determinants of prolonged intensive care unit stay in patients after cardiac surgery: A prospective observational study
- Perioperative use of iloprost in cardiac surgery patients diagnosed with heparin-induced thrombocytopenia (HIT) reactive antibodies or with true HIT (HIT reactive antibodies plus thrombocytopenia): An eleven year experience.
- Anemia due to Coad ministration of Renin-Angiotensin-System Inhibitors and PPAR Agonists in Uncomplicated Diabetic Patients.

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