Cardiogenic shock

- Management of non-Cardiac Organ Failure in cardiogenic shock
- Prognostic value of lactate clearance, fluid balance, and APACHE II score in patients with cardiogenic shock receiving extracorporeal membrane oxygenation
- Evaluation of the Aspartate Aminotransferase to Platelet Ratio Index for Predicting In-Hospital Mortality in Cardiogenic Shock Patients Admitted to the Intensive Care Unit
- Cognitive Function and Patient-Reported Outcomes After Cardiogenic Shock
- Survivorship After Cardiogenic Shock
- Perioperative and long-term outcomes of bilateral cardiac sympathetic denervation via videoassisted thoracoscopic surgery in patients with refractory ventricular arrhythmias
- Scorpion sting-induced malignant middle cerebral artery infarction
- Pulse Pressure and Acute Brain Injury in Venoarterial Extracorporeal Membrane Oxygenation: An Extracorporeal Life Support Organization Registry Analysis

Cardiogenic shock is a life-threatening medical condition resulting from an inadequate circulation of blood due to primary failure of the ventricles of the heart to function effectively.

Etiology

Cardiomyopathy

Dysrhythmias

Myocardial infarction.

Signs of inadequate blood flow to the body's organs include low urine production (<30 mL/hour), cool arms and legs, and altered level of consciousness. It may lead to cardiac arrest, which is an abrupt stopping of cardiac pump function.

As this is a type of circulatory shock, there is insufficient blood flow and oxygen supply for biological tissues to meet the metabolic demands for oxygen and nutrients. Cardiogenic shock is defined by sustained low blood pressure with tissue hypoperfusion despite adequate left ventricular filling pressure.

Treatment of cardiogenic shock depends on the cause. If cardiogenic shock is due to a heart attack, attempts to open the heart's arteries may help. An intra-aortic balloon pump or left ventricular assist device may improve matters until this can be done. Medications that improve the heart's ability to contract (positive inotropes) may help; however, it is unclear which is best. Norepinephrine may be better if the blood pressure is very low whereas dopamine or dobutamine may be more useful if only slightly low.

Cardiogenic shock is a condition that is difficult to fully reverse even with an early diagnosis. With that being said, early initiation of mechanical circulatory support, early percutaneous coronary intervention, inotropes, and heart transplantation may improve outcomes.

Complications

Cardiogenic shock has been associated with significant cognitive impairments in survivors. These impairments often manifest as deficits in memory, attention, mental processing speed, and problem-solving abilities, collectively affecting up to 80% of individuals who survive critical illnesses.

A recent study published in the Journal of the American College of Cardiology found that cognitive impairment is common after CS and may contribute to worse functional and health-related quality of life (HRQoL) outcomes. Additionally, a report from the Cardiogenic Shock Working Group indicated that women have worse cognitive, functional, and psychiatric outcomes at hospital discharge after cardiac events.

The etiology of these cognitive deficits is multifaceted, involving factors such as systemic hypoperfusion, inflammation, and potential microvascular damage during the acute phase of CS. These cognitive challenges can significantly hinder patients' ability to resume daily activities and work, thereby affecting their HRQoL. PMC

Patient-reported outcomes (PROs) provide valuable insights into the subjective experiences of CS survivors, encompassing physical, mental, and social health domains. The Patient-Reported Outcomes Measurement Information System (PROMIS) offers standardized tools to assess these domains, facilitating a comprehensive understanding of the impact of CS on patients' lives.

Incorporating PROs into clinical practice enables healthcare providers to tailor interventions more effectively, addressing specific cognitive and functional deficits. This personalized approach aims to enhance rehabilitation strategies, improve HRQoL, and support better long-term outcomes for CS survivors ¹⁾.

1)

Hall EJ, Schaffert J, Agarwal S, Ayers CR, Sykes AV, Lacritz LH, Shah AM, Ely EW, Cullum CM, Farr MA, de Lemos JA. Cognitive Function and Patient-Reported Outcomes After Cardiogenic Shock. J Am Coll Cardiol. 2025 Mar 10:S0735-1097(25)00483-8. doi: 10.1016/j.jacc.2025.02.023. Epub ahead of print. PMID: 40100175.

From: https://neurosurgerywiki.com/wiki/ - **Neurosurgery Wiki**

Permanent link: https://neurosurgerywiki.com/wiki/doku.php?id=cardiogenic_shock



Last update: 2025/03/18 21:35