

Initiation of a Cardiogenic Shock Team - Design

Jacobs Mark MD, Navindra Tajeshwar MD, Ian Gilchrist MD, Edlira Tam MD, Marc Goldschmidt MD, Robert Pyo MD, Henry Tannous MD, Alison McLarty MD, Alison Rowe BS, Kellie Gumersell BS, On Chen MD
Stony Brook University Hospital, Stony Brook, USA

Abstract

Introduction: Cardiogenic shock is a complex syndrome with generally poor outcomes. Inotropes and left ventricular unloading with mechanical circulatory support devices can be useful tools in patients with cardiogenic shock, however they must be started early in the course to prevent further progression of shock and patient deterioration. Early recognition of the shock state and initiation of treatment is essential for the early interruption of biochemical and inflammatory cascades, preventing organ damage and death. Formal, standardized protocols for the recognition and treatment of shock in this patient population have been studied. We describe here the design and implementation of a comprehensive cardiogenic shock team at a single site.

Objectives: Design a comprehensive cardiogenic shock team with standardized protocols to reduce variation in recognition and management of cardiogenic shock and improve patient outcomes.

Methods: Best practices were determined from prior studies and publications on cardiogenic shock. Informal voice of customer inquiries were obtained from important stakeholders, including cardiology attendings (including cardiac critical care, heart failure, and interventional), cardiothoracic surgery, nursing staff, and cardiology fellows. The activation process was designed based on feedback from all stakeholders (Fig. 1). Standardized protocols for activation of the team as well as for the management of pulmonary artery catheters and mechanical circulatory support were created and disseminated in the CCU. Initial and daily documentation specific to cardiogenic shock patients managed in the CCU were created and education on their use was given to cardiology fellows rotating in

that unit.

Conclusions: Standardization of management of cardiogenic shock through a comprehensive cardiogenic shock protocol can be a useful tool for improvement recognition and treatment of cardiogenic shock. Further study is necessary to help quantify improvements in outcomes.

