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Is Diastolic Dysfunction Associated with Poor Outcomes in Sepsis

The proposed research project will investigate the relationship between diastolic dysfunction and adverse outcomes in patients with sepsis. In order to investigate this, we will focus on the following specific aims: Specific aim #1: To assess the strength of the correlation between diastolic parameters and sepsis severity within the first 24 hours of admission. Hypothesis and expected outcome: Diastolic dysfunction will be more strongly correlated with more severe disease as defined by the Sepsis-Related Organ Failure Assessment score. Specific aim #2: To explore the relationship between diastolic function at presentation, its change during resuscitation, total volume of IV fluid received, and in-hospital and 28-day mortality. Hypothesis and expected outcome: Larger volumes of IV fluid administered to patients with abnormal diastolic function at presentation will lead to progressive decline in diastolic function during hospitalization and will be associated with increased in-hospital and 28-day mortality.