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Utility of push dose vasopressor in the emergency department

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13-385 - Utility of push dose vasopressor in the emergency department

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Purpose: The purpose of this study is to evaluate push dose vasopressor (PDV) usage patterns, efficacy, and safety in a single community hospital emergency department when used for rapid sequence intubation (RSI). Pre-intubation hypotension is a positive correlator to incidences of cardiac arrest. Precautions should be in place to prevent and treat hypotension during emergent intubation. The emerging strategy of utilizing PDV in emergency department (ED) patients is an underexplored and potentially efficacious option.

Methods: This study will be submitted to the Institutional Review Board for approval. This retrospective evaluation will identify critically ill patients receiving phenylephrine or epinephrine PDV in the ED during the peri-intubation period. Patients that underwent RSI prior to PDV usage at St. David's South Austin Medical Center (from March 2017 – January 2018) and after the PDV protocol was put into place (from March 2019 – January 2020) will be included. Exclusion criteria includes patients who received vasopressor drips in the ED >30 minutes prior to intubation, pediatric patients, patients who received CPR prior to or during intubation, and in the intervention group, those that did not receive PDV within 30 minutes of RSI. Data that will be collected include the following: patient age, sex, PDV administration including medication, dose, frequency, total number of doses, vital signs (systolic blood pressure (SBP), diastolic blood pressure (DBP), and heart rate) collected 30 min prior to administration and 30 min after administration of PDV, vasopressor continuous infusion rates, and intensive care unit length of stay. Adverse effects such as extravasation, reflex bradycardia, and unsafe increases in blood pressure, heart rate, or dysrhythmias will be reported. Medication errors such as dosing errors will also be reported.