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Abstract Title:	Enteral Nutrition Initiation During Periods Of Vasopressor Requirements and Elevated Lactate Levels
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Objective:	Describe the tolerance of enteral nutrition initiation with and without vasopressor requirements.
Abstract:	<p>The views expressed in this abstract are those of the authors and do not reflect the official policy or position of the US Army Medical Department, Department of the Army, DOD, or the US. Government.</p> <p>Introduction: Current recommendations include postponing enteral nutrition (EN) initiation during times of high or escalating doses of vasopressors until hemodynamic stability is achieved and starting EN at a low rate and advancing gradually during times of low to moderate doses of vasopressors, while monitoring for intolerance. However, the Society for Critical Care Medicine recommends initiating EN within 4-6 hours of injury for burn patients. Our goal with this analysis was to evaluate tolerance of EN during periods of different pressor requirements and lactate levels.</p> <p>Methods: We performed a retrospective evaluation on all burn patients admitted to the USAISR intensive care unit in 2018 who received EN. This performance improvement project was approved by our regulatory compliance division. Lactate levels and vasopressor use just prior to EN initiation were recorded. Gastric residual volumes during the 24 hours after EN initiation were evaluated, and the highest gastric residual volumes during this time were recorded and used in the analysis. When no gastric residual volumes were recorded, they were counted as 0 mL to allow for analysis. Ischemic bowel and aspiration after EN initiation were also collected. Means and standard deviations or medians and interquartile ranges (IQR) were calculated, and linear regression and Mann-Whitney U tests were performed. Significance was established at $p < 0.05$.</p> <p>Results: EN was initiated at a median of 25 hours after admission (IQR: 14-40 hours) in 58 patients with the following characteristics: 47 ± 19 years old, $29 \pm 24\%$ TBSA burn, 13 mechanical ventilator days (IQR: 5-30), 15% mortality. Lactate levels were a median of 1.9 mmol/L at the time of EN initiation (IQR: 1.6-2.4 mmol/L). Lactate levels did not have a</p>

	<p>significant correlation with gastric residual volumes (p=0.532, R2=0.007). Most (59%) patients (n=34) did not have vasopressor requirements at the time of EN initiation, but 21% (n=12) required vasopressin only, 2% (n=1) required norepinephrine only, and 19% (n=11) required a combination of vasopressin and norepinephrine. Those who required vasopressin only received an average of 0.03 ± 0.01 mcg/min and those who received norepinephrine received an average of 3.3 ± 1.7 mcg/min. There was a significant difference in median gastric residual volumes between patients who had no vasopressor requirements and time of EN initiation compared to those who required vasopressors [13 mL (IQR: 0-200 mL) vs. 240 mL (IQR: 21-430 mL), p=0.014]; however, the number of patients with gastric residual volumes over 500 mL was not significantly different (p=0.149) when comparing those who received vasopressors vs. those who did not (3% vs. 17%).</p> <p>When examining patients receiving vasopressin alone, there was a significant but weak correlation between vasopressin dose and gastric residual volumes (p=0.047, R2=0.339); however, when examining only patients receiving norepinephrine, there was not a significant correlation between norepinephrine dose and gastric residual volumes (p=0.905, R2=0.002).</p> <p>There was one incidence of aspiration and one incidence of ischemic bowel, both of which occurred 3 days after EN initiation. EN was initiated without vasopressors running and lactate levels were normal in both cases.</p> <p>Conclusions: The majority of patients tolerated EN initiation with vasopressor dosing of vasopressin up to 0.04 mcg/min and norepinephrine up to 7 mcg/min.</p>
Disclosures:	<p>Beth A Shields – No relevant financial relationships to disclose. Kaitlin A. Pruskowski – No relevant financial relationships to disclose. Leopoldo C. Cancio – No relevant financial relationships to disclose.</p>