

Results: During the 5-year period, 132 patients were included in this PI project. Of these patients, 15% were female; the median age was 42 years (IQR: 29-57), burn size 35% TBSA (IQR: 27-50), and mortality 25%. EN was initiated at a median of 24 hours (IQR: 14-38). Univariate analyses demonstrated mortality was significantly associated with larger burn size (48% TBSA [IQR: 29-68] vs 34% TBSA [IQR: 27-47], $p = 0.01$), increased age (56 years [IQR: 39-76] vs 39 years [IQR: 24-52], $p < 0.001$), and longer time to EN initiation (35 hours [IQR: 21-58] vs 21 hours [IQR: 12-31], $p < 0.001$). Logistic regression determined that, holding all other covariates constant, every hour delay in EN initiation increased the odds of mortality by 2% (95% CI [1.002-1.050], $p = 0.02$).

Conclusion: The results of this PI project suggest that compliance with the ASPEN-SCCM guidelines concerning the timing of EN initiation was low in these critically ill burn patients, and that delays in EN were associated with increased mortality. During the next phase of this PI project, the effectiveness of interventions to prompt earlier EN initiation will be assessed.

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1357065 - The Use of Enteral Naloxone and Achieving Energy Goals in Patients With Severe Burns

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Background: Because of greatly increased resting energy expenditure, patients with extensive burns require increased caloric intake to mitigate lean-body-mass loss and to support wound healing. These energy requirements can be difficult to achieve when gastrointestinal (GI) intolerance occurs. Naloxone given enterally can improve tolerance of enteral nutrition by counteracting the effect of narcotics on the GI system and thus result in improved nutritional intake. The purpose of this performance improvement (PI) project was to evaluate a change in practice in 2017 to the prophylactic use of naloxone.

Methods: Our Research Regulatory Compliance Division approved this PI project. The project included adult patients with $\geq 20\%$ total body surface area (TBSA) burns admitted between 2011 and 2020 with ≥ 14 full days of nutritional intake data, who were mechanically ventilated within 2 days of admission. Demographic, treatment, and nutritional intake data were collected. The energy goal was determined using the Milner equation. Percent energy goal achieved during the first 2 weeks was analyzed by independent samples T-tests and analysis of covariance. Variables found to be significant on univariate analysis were then subjected to multivariate logistic regression.

Results: A total of 191 patients were evaluated, of whom 118 patients (PRE group) did not receive prophylactic naloxone, and 73 patients (POST group) did. Mean burn size was $44 \pm 18\%$ TBSA; mean age was 43 ± 16 years; and 16% were women. The energy goal was 4180 ± 820 kcal/day, and patients achieved $71 \pm 20\%$ of this goal over the first 2 weeks of admission. Univariate analysis revealed a significant association between the percent energy goal achieved and gender, burn size, and use of prophylactic naloxone. All remained significant on multivariate analysis. Naloxone administration was associated with a 7% increase in 2-week total energy goal achievement when adjusted for gender and burn size.

Conclusion: This PI project found that prophylactic naloxone was associated with a significantly higher percent energy goal achieved during the first 2 weeks of admission in severely burned critically ill patients. We plan to continue to provide prophylactic naloxone to our critically ill patients with severe burns.

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1365754 - Impact of High Protein Targets on Nitrogen Balance in Patients on Venovenous Extracorporeal Membrane Oxygenation

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