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Abstract Title:	**Outcomes After The Administration Of Hydroxocobalamin**
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Objective:	1) Describe the relationship between hydroxocobalamin administration and the development of acute kidney injury. 2) Describe the impact of hydroxocobalamin administration on in-hospital mortality.
Abstract:	**Introduction:** The cyanide antidote hydroxocobalamin is frequently administered to patients after injures sustained during structure fires or fires in enclosed spaces, prior to confirming inhalation injury with bronchoscopy. It is unknown how the administration of hydroxocobalamin affects patient outcomes. The purpose of this study was to determine the population in which hydroxocobalamin is administered and to assess outcomes in patients who receive this medication in the ICU setting. **Methods:** This project was approved by our institution's research and regulatory compliance division as a PI project. This was a retrospective chart review that included all patients admitted to the burn ICU between July 1, 2016 and April 30, 2019. Patients were included if they received hydroxocobalamin after burn ICU admission. Patients who received hydroxocobalamin in the pre-ICU or pre-hospital setting were not included in this analysis. Data were collected from the electronic medical record and included demographic information, number of hydroxocobalamin doses administered, burn size (% TBSA), presence and grade of inhalation injury, lactate levels during the first 72 hours of hospitalization, carboxyhemoglobin levels, need for and duration of continuous renal replacement therapy (CRRT), duration of mechanical ventilation, and in-hospital mortality **Results:** Thirty-five patients received at least 1 dose of hydroxocobalamin after ICU admission; 31 patients received 1 dose and 4 patients received 2 doses. Patients were, on average, 48 ± 19 years old with a 25.5 ± 24.8% TBSA burn. Twenty-nine patients (82.9%) who received hydroxocobalamin in the ICU were diagnosed with inhalation injury via bronchoscopy. The median 24-hour fluid resuscitation requirement was 7.4 mL/kg/% TBSA (IQR 4.6, 12.7). Unadjusted for % TBSA, median fluid resuscitation requirements were 128.5 mL/kg (IQR

	92.8, 22.5). Twenty-two patients (63%) who received hydroxocobalamin developed acute kidney injury (AKI), as per the AKIN criteria, during the first 72 hours of admission. The average time from burn to AKI was approximately 20 hours. Twenty-one patients (60%) required CRRT at some point during their hospital stay; 42.8% of patients were initiated on CRRT during the resuscitation period. Acidemia was the most common indication for CRRT (n=12), followed by volume management (n=10), hyperkalemia (n=8), and uremia (n=4). The mean admission lactate level was 4.4 ± 2.3 mmol/L. On average, lactate clearance, as defined by 2 consecutive lactate levels less than 2 mmol/L, occurred in 34.6 hours; 11 (31.4%) patients did not clear lactate within 72 hours. One patient had a carboxyhemoglobin level greater than 10% on admission and 4 patients had a carboxyhemoglobin level greater than 3% on admission. The average duration of mechanical ventilation was 11 ± 7 days. Ten (28.9%) patients died during their hospital stay. **Conclusion:** Most patients who receive at least 1 dose of hydroxocobalamin after ICU admission developed AKI within the first 72 hours, with 42.8% of patients requiring CRRT during the initial resuscitation period. Further studies on the relationship between the administration of hydroxocobalamin and the development of AKI and in-hospital mortality are warranted.
Disclosures:	Kaitlin A. Pruskowski – No relevant financial relationships to disclose Leopoldo C. Cancio – No relevant financial relationships to disclose