

The purpose of this study was to review central line-associated blood stream infection (CLABSI) data from a surgical trauma intensive care unit to better understand patient risk factors, pathogens, and treatment interventions” Duane et al (2015).

Reference:

Duane, T.M., Kikhia, R.M., Wolfe, L.G., Ober, J. and Tessier, J.M. (2015) Understanding Gram-negative Central Line-Associated Blood Stream Infection in a Surgical Trauma ICU. *The American Surgeon*. 81(8), p.816-9.

ReTweet if useful... How to understand gram-negative bacterial cause of CLABSI
[@ivteam #ivteam](http://ctt.ec/37sd2+)

Click To Tweet

Abstract:

The purpose of this study was to review central line-associated blood stream infection (CLABSI) data from a surgical trauma intensive care unit to better understand patient risk factors, pathogens, and treatment interventions. We performed a retrospective review of all surgical ICU patients who met the Centers for Disease Control definition for Gram-negative CLABSI from 2006 through 2013. Demographics, pathogens, interventions, and outcomes were evaluated. A total of 40 patients were included with an average age of 49.9 ± 19 years and 72.5 per cent male. The average length of central venous line (CVL) was 11 ± 5.9 days with average time from line placement to positive culture 9.4 ± 6.8 days. Most common organisms were Enterobacter species (37.5%) with 17.8 per cent of all cultured organisms considered multidrug resistant. Piperacillin-tazobactam (67.5%) was the most commonly used antibiotic. Overall mortality rate was 22.5 per cent. A total of 11 patients who developed a recurrence did so at 10.7 ± 8 days and were similar to those without recurrence. Predominant pathogens associated with surgical trauma intensive care unit CLABSI in this study are different from those Gram-negative bacteria associated with published studies in the general hospital population. Further investigation into risk factors for infection and relapse is important to minimize such consequences. Understanding appropriate line placement and use as well as clarifying optimal duration of therapy is integral in improving outcomes.

Thank you to our partners for supporting IVTEAM