

Rebeca House

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Title: *Evaluation of Safety and Efficacy of Currently Used Reversal Strategies for Factor Xa Inhibitor Associated Bleeding Events: A Retrospective Study*

Abstract

Factor Xa inhibitors, a widely used drug class of anticoagulants, did not have an FDA approved reversal agent until recently. Meanwhile, off label reversal strategies began to be utilized and they continue to be utilized today. Due to the current use of off label reversal strategies, this study was completed to evaluate efficacy and safety of Kcentra. Although this study intended to evaluate the safety and efficacy of multiple reversal strategies used off label, Kcentra was the only one included in the study because it is the main reversal strategy that the hospital uses in its formulary. This was a retrospective study of adult patients who received a factor Xa inhibitor reversal strategy for a factor Xa associated bleeding event within two years (from Nov. 2017 to Nov. 2019). A total of eight patients were included in the study. Data recorded to evaluate the safety and efficacy included patient demographics, factor Xa inhibitor information, types of bleeding events, causes of bleeding events, information on reversal strategy used, documentation of complications, whether or not hemostasis was achieved, hemoglobin levels before and after blood transfusions and approximate time to hemostasis. Kcentra does not seem to be efficacious for factor Xa inhibitor associated bleeding events due to the length of time it took for patients to reach hemostasis. It is unclear whether the use of Kcentra led to hemostasis or time alone with the discontinuation of the factor Xa inhibitor did. Due to the small sample size of this study, more studies should be completed including multiple hospitals to increase population size.