027

ASSESSING BLEEDING RISK IN PEDIATRIC PATIENTS WITH ACCIDENTAL INGESTION OF NOVEL ANTICOAGULANT AND ANTIPLATELET MEDICATIONS

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BACKGROUND: In recent years, there has been an increase in the use of antiplatelet agents and novel anticoagulants. The natural exploratory nature of toddlers makes young children particularly at risk for accidental ingestions. There is little information on bleeding events and outcomes of children following exploratory ingestions of these agents.

METHODS: This retrospective review of children age < 6 years, involves calls to seven poison control centers (PCC) in four states. A computerized search identified all calls from 2005 to 2014 involving the following drugs: apixaban, clopidogrel, dabigatran, edoxaban, prasugrel, rivaroxaban, and ticagrelor. Adult patients were excluded, as were all intentional ingestions. Thus, this study focused exclusively on accidental pediatric ingestions. Follow up was defined *a priori* as at least one phone call occurring at least 4 hours after the initial call.

RESULTS: During the study, a total of 627 calls were identified. The median (interquartile range) age was 2 (1.5-2) years. Males accounted for 383 (61%) of calls. Follow up was available for 284 (46%) of calls. Among these 284 patients, the duration of follow up was < 24 hours in all (98.4%) except 5 cases. The rates of bleeding and the corresponding number of cases are as follows: apixaban (0/7); clopidogrel (0/553); dabigatran (0/19); prasugrel (0/17); rivaroxaban (0/27); ticagrelor (0/4). No cases of edoxaban were identified.

LIMITATIONS: The primary limitation is this study relied on retrospective PCC data with no confirmation of exposure and no direct patient evaluations. Furthermore, many patients had no follow up and of those who did, the majority had less than 24 hours of follow up.

CONCLUSION: In this study of novel anticoagulants and antiplatelet agents, no cases of bleeding were identified among the 627 accidental pediatric ingestions.