

Disposition and Mechanism of Injury in Auricular Hematoma in National Emergency Departments

Introduction: The objective of this study is to compare demographic variables vs. disposition and mechanism of injury within auricular hematoma (AH) patients in the national emergency department (ED) setting.

Methods: A cross-sectional study was conducted using the National Electronic Injury Surveillance System (NEISS) database between 2010–2020. Patients (n=562) presenting to the ED with AH between were isolated. Age groups were defined as: G1 (less than 18 years old), G2 (18-64 years old), G3 (65 years or older). Univariate analysis was utilized to compare demographics variables with disposition and mechanism of injury.

Results: A national estimate of 11,472 AH cases were identified. Majority of AH cases were male (79%), caused by household goods/furniture (HGF) (50.4%), and were not hospitalized (95.7%). Female patients were more likely to be: G1 or G3; White, Hispanic, or Asian; and have been involved with baseball, HGF, miscellaneous, or playground/toys (all, $p < 0.001$). G1 patients were more likely to be Hispanic; had no hospital admission; and have been involved with baseball, football, playground/toys, or wrestling (all, $p < 0.001$). G3 patients were likely to be White or Other, directly hospitalized, and involved with HGF (all, $p < 0.001$). Comparison across race groups revealed that African Americans (AA) (1.7%), Hispanic (0.4%) and Asian (0.0%) patients were less likely to be admitted for AH compared to their White (5.1%) counterparts (all, $p < 0.05$). Patients injured from HGF were most likely to be hospitalized compared to other etiologies (7.5% vs $\leq 4.4\%$; all, $p < 0.05$).

Conclusion: Patients who were White, G3, or injured from HGF were more likely to be hospitalized. There may exist healthcare disparities associated with decreased hospital admission with AA, Hispanic or Asian patients. AH patients are classically described as a young male playing contact sports (i.e., wrestling) but more attention should be placed on the female or elderly patient injured from HGF.