

Impact of COVID-19 on Emergency Department Use for Genitourinary Injury

Purpose: We investigated how the epidemiology of United States (US) emergency department (ED) usage for pediatric and adult genitourinary (GU) injuries changed during the COVID-19 pandemic.

Materials and Methods: We queried the National Electronic Injury Surveillance System for pediatric (<17 years old) and adult (≥18 years old) injuries to the public region from March to December of 2019 (pre-COVID-19) and 2020 (COVID-19). Adult and pediatric data were analyzed separately. The data was probability-weighted to produce national estimates. We compared demographic and injury characteristics across the two time periods by χ^2 test in SPSSv27 to quantify changes in ED use for GU injuries.

Results: GU injury accounted for 1% of pediatric and 0.4% of adult ED visits. GU injuries decreased in adults (23,387 vs 28,090 cases) and children (19,684 vs 26,857 cases) during COVID-19. Compared to pre-COVID-19, there were significant differences in age, race, diagnosis, disposition, location of injury and product causing injury ($p < 0.01$, each). During COVID-19, there was a greater proportion of GU injuries in toddler and school age children; female children; White, Asian, and American Indian and Alaskan Native children; 24-34, 45-54, and 75-84 year olds; and Black and Asian adults. Proportion of GU avulsions, burns, and lacerations increased during COVID-19 for both adults and children. Cases treated and released increased during COVID-19 in children but decreased in adults.

Conclusions: COVID-19 decreased the volume of pediatric and adult patients with GU injury presenting to US EDs. Due to COVID-19-related concerns, patients may have altered health-seeking behaviors and avoided the ED unless they perceived a high severity of injury. Healthcare providers may have altered their care plans due to decreased capacity for non-COVID related admissions.