

Putting the golf cart before the horse: pediatric head trauma outpaces education and safety regulations

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In their article,¹ the authors compare injury distribution, severity and outcome between children injured in all-terrain vehicle (ATV) and golf cart accidents across 10 Florida trauma centers. Their study demonstrated increasing incidence of pediatric golf cart-related trauma, a rise reported since the early 2000s by Watson *et al*² and our own institution,³ with a corresponding increase in medical and regulatory interest. Notably, more than 60% of children injured in golf cart incidents suffered a traumatic brain injury (TBI; mild, moderate, or severe), including 34% with an intracranial injury, significantly surpassing the rate among the ATV cohort. This alarming incidence of head trauma confirms the findings in large national database studies, including Miller *et al*,⁴ that found children are at significantly greater risk of golf cart ejection and subsequent head trauma than adults. The authors correctly note that as golf carts increase in popularity and perception as a means of municipal transportation, the number of children suffering intracranial injuries is likely to increase without regulatory intervention and community education.

We are encouraged that laws have begun to address the data. Prior to an October 2023 law requiring golf cart drivers under 18 years be licensed, Florida children as young as 14 were permitted to operate these vehicles, which can reach and surpass 25 mph on both fairways and roadways. Licensing requirements are important but insufficient, as children were most often passengers in golf cart accidents. Seat belt improvements may go further in preventing injury. The seat belt typically consists of a single hip restraint, which, by 2024 federal law,⁵ is required to accommodate an average 6-year-old child. In the cohort assembled by the authors, 21% of golf cart accident victims were younger than 6 years. Furthermore, Starnes *et al*⁶ found that seat belts were not even used in 90% of golf cart crashes involving children. Though they were infrequently worn, helmet use resulted in significantly fewer TBIs among children involved in ATV crashes.⁷ The author's findings on TBI following golf cart injuries strongly suggest that community education and laws regarding helmet use on these vehicles may prevent numerous head injuries.

ATV and golf cart trauma is something that we must prevent when possible and manage when

required. As pediatric and trauma surgeons, we urge caretakers of children to approach golf cart safety with the same concerns as they would ATV. In some cases, particularly with very young children, the best strategy may be to avoid them altogether.

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