CHANGES IN PROPORTION OF PEDIATRIC NON-ACCIDENTAL TRAUMATIC INJURIES DURING THE EARLY COVID-19 TIME PERIOD.

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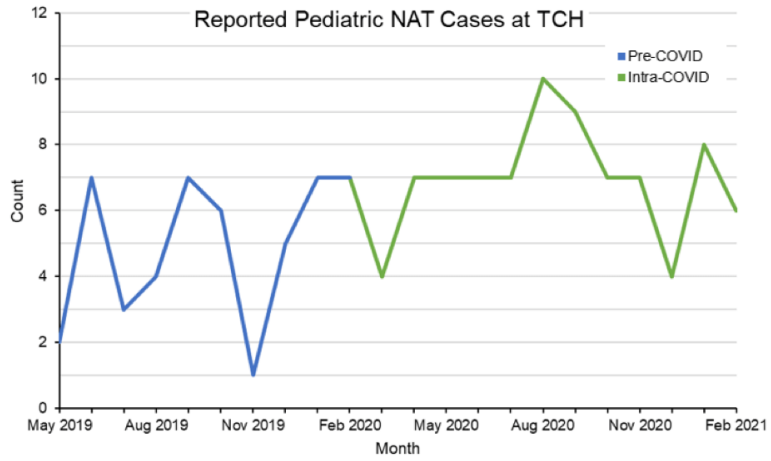
Background: It is suspected that pediatric non-accidental trauma (NAT) increased following the onset of the COVID-19 pandemic. Uncovering the specific effects of the COVID-19 pandemic on different types of trauma can help inform trauma care, shape public policy, and better prepare society to navigate a post-COVID world.

Materials/Methods: We conducted a retrospective review using data from the institutional trauma database at Texas Children's Hospital main campus, West Campus, and the Woodlands, of all non-accidental traumas aged 18 years or younger from May 2019 to February 2021. The first 10 months of this period (May 2019 to February 2020) were considered to be a pre-COVID time frame, with the ensuing 12 months (March 2020 to February 2020) considered to be an intra-COVID time frame.

Results: In the intra-COVID time period, there were 94 (0.10% of total admissions) NAT incidents, significantly different ($p < 0.00001$) from the proportion of child abuse incidents in the pre-COVID time span (54 incidents, 0.04% of total admissions). In both time periods most victims were less than a year old, 64.8% and 76.6% for pre-COVID and intra-COVID cohorts respectively. The distribution was notably skewed towards infants (median 0.67 and 0.50 years) for pre-COVID and intra-COVID cohorts respectively.

Conclusions: The COVID-19 epidemic invoked stress and socioeconomic burdens on households nationwide. We reviewed the effects of the pandemic on the admissions and non-accidental trauma rates at our institution and compared them to the time frame prior. Mandated shutdowns and isolation led to decreased pediatric admissions but increased NAT rates. Knowledge of such data, trends, and circumstances will keep healthcare providers alert and vigilant in identifying children at risk, and may impact child abuse protocols and guidelines.

Images / Graph / Table


Reported Pediatric NAT Cases at TCH
Pre-COVID
Intra-COVID
Count
12
10
8
6
4
2
0
May 2019
Aug 2019
Nov 2019
Feb 2020
May 2020
Aug 2020
Nov 2020
Feb 2021
Month