Children's Hospital of Philadelphia PolicyLab

Prevalence of Abuse and Additional Injury in Young Children With Rib Fractures as Their Presenting Injury

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The primary objective of this study was to determine the prevalence of (a) additional injuries, (b) abuse as determined by a standardized scale, and (c) reports to child protective services (CPS) among children younger than 5 years in whom a rib fracture was the first presenting injury concerning for abuse. A retrospective study of children younger than 5 years diagnosed with rib fractures at a tertiary pediatric hospital between 2007 and 2018 was performed. Children in motor vehicle crashes, hospitalized after birth, or with previously diagnosed metabolic bone disease were excluded. We included only those children whose rib fractures were the first presenting injury. Demographic and clinical information was abstracted from the records. Prevalence of additional injuries, a diagnosis of abuse, and a report to CPS were calculated. Associations between patient demographic and clinical characteristics and the outcomes of interest were examined. Of the 67 cases included, additional injuries concerning for abuse were identified in 40 (60%), and 58% were deemed likely or definite abuse. Reports to CPS were filed in 72% of cases. Posterior rib fractures, multiple rib fractures, and presence of rib fractures of multiple ages were all associated with presence of additional injuries and classification as definite or likely abuse (all P ? 0.05). The presence of a rib fracture in young children is associated with a high likelihood of additional concerning injuries and should prompt a thorough evaluation for child abuse.

Journal:

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