



Utilizing trauma admissions as an opportunity to identify developmental and behavioral concerns

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Abstract

Background

Developmental and behavioral problems are often underdiagnosed in the pediatric population, and are risk factors for injury from trauma. Early intervention for these concerns yields improved outcomes. No prior research has screened for these difficulties during pediatric trauma admissions.

Methods

The current study utilized “The Survey of Wellbeing of Young Children” (SWYC) to assess for possible areas of concern by parent report. Concerns were compared to the presence of screening documented in their pediatrician's last well-child visit note.

Results

Of the 27 participants, 59.3% had developmental, behavioral, parental, or familial concerns. Overall, 46.2% of pediatricians had formally screened for concerns at the child's last well child visit, resulting in 25.9% being identified with new concerns found on the SWYC.

Conclusions

Pediatric trauma admissions provide an important opportunity to screen for behavioral and developmental concerns in a population that is at risk for these concerns and that could greatly benefit from having problems identified.

Introduction

Overall, 10–13% of children have some type of developmental delay, yet only 2–3% of children receive early intervention services.^{1, 2, 3, 4, 5} Frequently these delays are under-identified leading to missed opportunities to intervene in the child's life at an early age.⁶ The importance of earlier identification and intervention cannot be overstated, with data showing that earlier identification leads to significantly improved outcomes.^{7, 8, 9, 10, 11} Examples of improved outcomes include improved academic achievement, school readiness, IQ scores, and social interactions, as well as decreased need for special education enrollment in school.⁷ The responsibility to identify delays often falls on the primary care physician. In fact, in 2006, the American Academy of Pediatrics recommended that all children between the ages of 0 and 3 have developmental screening as part of their routine well-child visit via standardized screening tools.¹² Developmental screening was further encouraged when the Affordable Care Act mandated that insurance cover developmental screening.¹³

Developmental delays and behavioral problems, as well as other factors such as socio-economic status and parental substance abuse, are known risk factors for injury from trauma.¹⁴ Despite this, to our knowledge no prior study has considered systematically evaluating patients admitted with traumatic injuries for developmental or behavioral concerns. The current study aimed to provide a framework of comprehensive care for pediatric trauma patients. This would allow for an opportunity to screen patients that may otherwise be missed by routine well child visits, particularly within the context of a broader focus on screening as part of preventative care. Specifically, this study aimed to determine the prevalence of recent outpatient screening in the pediatric trauma population, and whether systematic screening in the trauma setting would lead to identification of previously undetected developmental or behavioral concerns. Secondly, the study considered parental and familial concerns within this population.

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Study cohort

We included patients between 1 and 65 months of age who were hospitalized following a traumatic injury between March 2016 and December 2016. This age range was chosen due to the importance of identifying delays at an early age, as well as the limited age range of the study measure, the “The Survey of Wellbeing of Young Children” (SWYC).¹⁵ Patients involved in state custody evaluations due to concern for nonaccidental trauma were excluded. ...

Study design

This prospective descriptive study included children ...

Study population

During the study enrollment period, 92 children who met the study's age criteria were admitted following a traumatic injury. Eleven of these patients were excluded due to circumstances that were being investigated for nonaccidental trauma, leaving 81 patients for the study. Of these, parents of 46 patients were asked to participate via a mailed packet due to study personnel limitations, and 5 packets were returned (10.9% participation rate by mail). Parents of 34 patients were approached in ...

Discussion

In this prospective descriptive study, 33% of patients had developmental or behavioral concerns identified through screening, of which 62.5% were not screened at their most recent well child visit. Furthermore, 59% of patients were found to have areas of behavioral, developmental, family, or parental concerns overall. With only 46.2% of pediatrician notes referencing formal screening, approximately 1 in 4 patients had new concerns identified. The results suggest that trauma admissions provide ...

Conclusions

In this prospective descriptive study, a large proportion of patients admitted following a traumatic injury had areas of behavioral, developmental, family, or parental concerns. Moreover, approximately 25% of these patients had new concerns not previously screened for by their pediatrician. The results suggest that this population provides a unique and important opportunity to screen for these concerns, thus allowing for subsequent potential diagnosis and intervention. ...

Conflict of interest

This research did not receive any specific grant from funding agencies in the public, commercial, or not-for-profit sectors. The authors have no conflicts of interest to disclose. ...

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