

Infant Bruising: When Is It Abuse?

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Source: Pierce MC, Magana JN, Kaczor K, et al. The prevalence of bruising among infants in pediatric emergency departments. [AnnEmerg Med. 2016;67\(1\):1-8](#); doi:10.1016/j.annemergmed.2015.06.021. See [AAP Grand Rounds commentary by Dr. James Anderst](#) (subscription required).

PICO Question: Among previously healthy infants presenting to pediatric emergency departments, what is the prevalence of bruising?

Question type: Descriptive

Study design: Prospective observational

Investigator's from children's hospitals emergency rooms in San Diego, Chicago, and Cincinnati looked at previously healthy children 12 months of age and under presenting to their centers. They used a nice mechanism to collect data in that they scheduled "research shifts" in advance where an investigator identified patients in the emergency departments and enlisted a screening examiner to look for bruising. Other members of the team collected clinical data from the medical record.

Out of 2488 infants screened, 88 (3.5%) had bruising, and 23% of those were referred for abuse evaluation. In the less mobile children 5 months and younger only 1.3% had bruising, most of them had a trauma chief complaint, and about half were referred for abuse evaluation.

These numbers provide an informative baseline for future studies of bruising etiology, a modest goal fully met by the investigators. Dr. Anderst's commentary points out an additional intriguing point to consider the diagnosis of von Willebrand disease in such infants, since this entity may be present in up to 1% of the general population and could be an important contributor to unexplained bruising in premobile infants.

One hopes that these incremental studies will lead to more efficient use of abuse evaluations in this patient population, both to increase identification of abused children and also to avoid unnecessary investigations.

Further Reading

- [Prevalence of Abuse in Young Children With Femur Fractures](#)
- [Maltreatment in Multiple-birth Children](#)
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