CHAMP Quarterly Educational Case Review

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Topic: A Case of Twins with Fractures

Why this case is of interest

- Highlights how the history must supply the mechanism to explain the fracture and how important a detailed history is.
- Illustrates the importance of assessing asymptomatic siblings, especially twins.

Case summary

Four month old male infant is referred for evaluation of spiral femur fracture reportedly caused when dropped by the father. Skeletal survey reveals additional fractures. Assessment of asymptomatic twin reveals fractures specific for child abuse.

Key learning points

- Fractures can be the result of child abuse.
- Fractures in infants who are developmentally incapable of getting around are suspicious.
- Some fractures are specific for inflicted injury.
- Asymptomatic siblings should be assessed; consider skeletal survey in siblings less than two years of age, especially twins.

Summary of literature

Leventhal JM, Martin KD, Asnes AG. Incidence of fractures attributable to abuse in young hospitalized children: Results from analysis of a United States database. *Pediatrics* 2008; 122:602

Adapted from Jenny, Carole, editor. *Child Abuse and Neglect: Diagnosis, Treatment and Evidence*. Chapter on Fracture Biomechanics by Gina Bertocci.

Alexander RC, Smith WL. Investigating abuse in the asymptomatic twin. *Arch Pediatr Adolesc Med* 1996;150(4):444-445.