SHAKE study: Subdural Hematoma: Age, Kinematics and Evolution

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Content

- Case
- Forensic pediatrics in the Netherlands
- Research
- SHAKE study
Case

Baby 4 weeks old
Fell off sofa
Bruise on leg, no other abnormalities
Normal behavior, not painful
Nice parents

Bruises in Infants and Toddlers
Those Who Don't Cruise Rarely Bruise

Naomi F. Sugar, MD; James A. Taylor, MD; Kenneth W. Feldman, MD; et al

Case

- Child abuse workup was performed:
  - Fundoscopy
  - CT-head
  - Skeletal survey
Complex child abuse?

Judicial

Medical
Centralization forensic evaluations
complex child abuse cases

Pathology
Toxicology
Anthropology
Radiology
Forensic evaluation of child abuse
Research
Several research topics

- Screening Emergency room department
- Detection of child abuse in trauma cases
- Fractures in children
- Child Sexual Abuse
- Abusive Head Trauma
SHAKE study- Abusive Head Trauma
SHAKE study- Abusive Head Trauma
Cases Netherlands Forensic Institute 2010-2020

- Approximately 200 children, 0-4 years old
- 20%-30% deceased children
- Database Castor EDC
  - ±2000 variables
Primary objectives

- Dating brain injuries
- Comparison accidental vs non-accidental head trauma
- Presence of prior injuries and opportunities to diagnose child abuse
- Planning: Q1 2023
Future perspectives

• Prospective studies

• Multidisciplinary collaborations
  • Medical
  • Legal
  • Big data/artificial intelligence
  • ..?

• International collaborations
Questions?

Questions or interested in research/internships?

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