Child Abuse Pediatrics and Pediatric Radiology

A historic collaboration serving the interests of children
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I have no conflicts or disclosures to report
A Historic Collaboration the Interests of Children

Kempe

Silverman
John Caffey, MD
Another Pediatrician and Radiologist

- 1946, described 6 infants with SDH and long bone fractures with no history of trauma.
Today’s Collaboration!

Child Abuse Pediatrics

Pediatric Radiology
PAIDIKATACHROMAILOGY
Present Status of a New Subspecialty

- Endorsed by the ABP and ABMS in 2006.
- First Subboard formed in 2006
- First certification examination in 2009
- Second certification examination in 2011
- Currently approximately 230 Board Certified Child Abuse Pediatricians.
The Importance of Collaboration

- Differential Diagnoses
- Combined Clinical Experience
- Specialty Training Interaction
- Arriving at the Most Appropriate Diagnosis and Management Plan
- Developing the Most Appropriate Case Review and Opinions
- Combined Specialties Research
CAP Examination Questions

- Radiology
- Ophthalmology
- Orthopedics
- Pathology
- Gynecology (trauma, STIs, development)
- Differential Diagnoses
  - Sexual abuse mimics
  - Physical abuse mimics
- Biomechanics
- Hematology and Coagulopathies
- Epidemiology
- Psychology (including physical & intellectual development)
- Scholarly activity and research
- Many other areas: total training after medical school is 3 years of Pediatric Residency followed by 3 years of subspecialty Fellowship.
A New Issue: Medical Diagnoses in Court Testimony

- Child Abuse Pediatricians and Radiologists also collaborate with Ophthalmologists, Orthopedists, Forensic Pathologists, Neurologists, Neurosurgeons, Other Physicians, Biomechanical Engineers, Child Protection Workers, Law Enforcement Officers, Hospital Social Workers, Attorneys, and others. Testimony optimally is not based on a single physician’s opinion or hypothesis.
Is There Controversy About Shaken Baby Syndrome – Abusive Head Trauma?
Controversy equalizes fools and wise men — and the fools know it.

Oliver Wendell Holmes (1809-1894)
Innocents in Jail vs. Innocents Killed
Controversy # 1

What’s in a name: Abusive Head Trauma (AHT), or Shaken Baby Syndrome (SBS)

Abusive Head Trauma in Infants and Children, Christian CW, Block RW. Pediatrics, 2009.

“Few pediatric diagnoses engender as much debate as AHT, in part because of the social and legal consequences of the diagnosis.” “The goal of this policy statement is not to detract from shaking as a mechanism of AHT but to broaden the terminology to account for the multitude of primary and secondary injuries that result from AHT,...”
What We Must Learn, What We Must Do To Move Forward

- How to Address Biologically Plausible Conditions in an Appropriate Differential Diagnosis.
- How to recognize “alternative hypotheses” that are unproved (birth injury timing) or implausible (rickets, scurvy).
- How to Address the Issue of Timing of Injury (Multidisciplinary investigations)
- How to Move Away from Taking Sides for Profit, Self-Aggrandizement, and for exploitation of Media’s Hunger for Emotion Rather than Facts.
What is Evidence-Based?

- It is NOT confined to randomized, controlled, blinded studies.
- Evidence is based on:
  - Clinical reports that are honest and accurate,
  - Case reports that are substantiated by accepted, peer-reviewed literature,
  - Series of observations arriving at a definitive conclusion,
  - Corroboration of previously published studies
  - And more . . . . .
The Scientific Method

1. Ask a question
2. Do background research
3. Construct a hypothesis
4. Test your hypothesis by doing an experiment
5. Analyze your data and draw a conclusion
6. Report your results (Was your hypothesis correct?)

If the model conflicts with clinical experience consensus, most likely the model is wrong (Biofidelity)
Working Toward an Optimal Approach to Child Abuse Differential Diagnoses

- Use interprofessional collaboration: radiology and child abuse pediatrics along with other professionals.
- Use professional meetings, literature, and discussion rather than courtroom shenanigans to determine what is scientific fact.
- Use objective reasoning and leave emotion our of the equation.
Thank You for Inviting Me