Child abuse and neglect: What does a PCP need to know?

Anne Nielsen, DNP, ARNP, CPNP-PC
Pediatric Nurse Practitioner:
General Pediatrics and Child Protection Program,
University of Iowa Stead Family Department of Pediatrics

Disclosures/Conflicts of interest
• No actual or potential conflicts of interest in relation to this presentation.

Acknowledgements
• Dr. Resmiye Oral, Child Abuse Pediatrician

Disclaimer
We all come from different backgrounds and experiences. Talking about child abuse may bring up strong emotions. There will be some graphic photographs in this presentation. Please feel free to step out of the room if you need to.

Presentation Outline
• Part 1: Child Abuse Categories, Prevalence & Prevention
• Part 2: Recognizing Child Abuse
• Part 3: Reporting Child Abuse
• Part 4: Follow-up

Part 1: Child Abuse Categories, Prevalence and Prevention
Categories of Child Abuse in Iowa

- Sexual abuse
- Mental injury
- Presence of illegal drugs in a child's body
- Physical abuse
- Allows access by a registered sex offender
- Allows access to obscene material
- Manufacturing or possession of dangerous substances
- Bestiality in the presence of a minor
- Child prostitution
- Denial of Critical Care, Failure to provide proper supervision
- Denial of Critical Care, Failure to provide adequate food and nutrition
- Denial of Critical Care, Failure to provide adequate shelter
- Denial of Critical Care, Failure to provide adequate clothing
- Denial of Critical Care, Failure to provide adequate health care
- Denial of Critical Care, Failure to provide mental health care
- Denial of Critical Care, Gross failure to meet the emotional needs of the child
- Denial of Critical Care, Failure to respond to an infant's life threatening condition
- Sex Trafficking

Victims by age

1,750 deaths related to child abuse (2016)

Prevention: Anticipatory guidance during well visits

- Realistic expectations
- Do not shake baby
- Ok to leave baby in a safe place like the crib and let baby cry and step away
- Importance of support system
- Healthy discipline techniques
- Potty training expectations
- Safe touch
- Every child is special
- PPD screening for mothers

Perpetrators: Relationship to victim, age distribution (2016)

- Parent
- %
- Mother 27.0
- Father 16.8
- Both 20.1
- Total Parents* 78.0

*could include mother and/or father and non-biological parent
**Child Risk Factors**
- Developmentally delayed
- Premature, physical illness
- Behavioral problems
- Unloved/unwanted
- Runaway
- Previously victimized
- Dysmorphic features

**Caretaker Risk Factors**
- Family disruption
- Substance abuse
- Live in boyfriend
- Single/teenage parent
- Unrealistic expectations
- Parental mental health problems
- Childhood abuse experiences
- Perceptions of the child

**Environment Risk Factors**
- Unemployment
- Social isolation
- Pedophilia, internet
- Violence
- Substance abuse

**Behavioral Indicators**
- Lack of normal bonding with parent/guardian
- Child regularly fatigued, listless
- Child stealing food
- Child wary of adult contact, apprehensive with others, afraid-to-be at home.
- Young children recently manifesting clinging behavior, new fears of persons or places.
- Regressed/baby-like behavior, extreme need for affection
- Child reporting no caretaker at home
- Observations of inappropriate parental behaviors

**Physical Abuse: Physical Indicators**
- Without plausible accidental history:
  - Fractures; multiple fractures at different stages of healing.
  - Significant head injury, subdural hematoma, subarachnoid hemorrhage, retinal hemorrhage, brain edema, subgaleal hematoma, avulsed hair
  - Intra-abdominal injury;
  - Intra-thoracic injury;
  - Burns with clear demarcation or spared flexion creases; third-degree burns
Physical Abuse: Physical Indicators

- **Without plausible accidental history:**
  - Injuries to protected areas
  - Patterned injuries suggesting use of an object
  - Injuries at different stages of healing
  - Petechiae around the eyes associated with bruising around neck
  - Rope burns around wrists and ankles
  - Adult bite marks

Do they make sense together?

Child Caretaker

HISTORY

Do they make sense together?

Child DEVELOPMENT

Do they make sense together?

Injury MECHANISM

Do they make sense together?

EXTENT

Red Flags

- H/o trauma not consistent with child’s development
- Delay in seeking medical treatment
- Any bruise in an infant that does not pull to stand
- Acute or healing intra-oral injuries
- Any fracture in a non-ambulatory child
- Metaphyseal fractures (bucket-handle, corner)
- Rib fractures, especially posterior
- Unexpected finding of healing fracture
- Unusual locations of injury

Sexual Abuse: Physical Indicators

- **Without plausible history:**
  - Anogenital acute injury
  - Scars to hymen, posterior fourchette, perianal area outside the midline, deep posterior hymenal notches
  - Immediate anal dilation >20 mm without stool in ampulla
  - Torn, blood stained underclothing

***Most physical exams in victims of sexual abuse are normal***

Child Neglect: Physical Indicators

- Growth parameters below and/or falling below expected for age
- Emaciated appearance, constant hunger
- Poor hygiene, inappropriate dressing
- Low caloric intake associated with decreased or absent weight gain
- Lack of medical care for asthma, diabetes, epilepsy, etc.
- Lack of supervision in dangerous situations
- Symptoms of drug exposure or withdrawal
- Abandonment

Red Flag Lab Findings

- Positive urine, hair, meconium, umbilical cord or blood screen for alcohol or drugs of abuse
- Positive skeletal survey
- Positive Chlamydia, Gonorrhea, Syphilis, HIV, Hepatitis B, Hepatitis C, HPV, Trichomonas, HSV
- Positive pregnancy test
- Positive semen on the child
- Recurrent UTIs; no reasonable explanation.
Sentinel Injury

- 20-25% of abuse cases have a prior missed injury
- In abused infants, most common sentinel injuries are bruising (80%) or intraoral injuries (11%)
- Recognition of sentinel injuries can lead to earlier intervention and can be life saving
- Primary care providers play a huge role in recognizing sentinel injuries!

TEN-4 FACES-p

- **TEN**
  - Torso (trunk)
  - Ear
  - Neck
- **FACES**
  - Frenulum (mouth)
  - Angle of the jaw
  - Cheek
  - Eyelids (bruising)
  - Subconjunctival hemorrhage (eye)
- Bruises in the TEN distribution in a child under 4 years of age, or ANY bruise in an infant less than 4.99 months of age
- P - Patterned skin injuries

Inflicted Burns

- Proximal demarcation line suggesting the depth of hot liquid in immersion burns
- Lack of splash marks beyond demarcation line
- Sparing of creases suggests defensive flexion due to fear and pain

Immersion burn, flexor surface spared

Stocking pattern

Cigarette and Lighter Burns
Failure to thrive

- Weight < 80% of ideal weight for age
- Height and HC > 5%, weight < 5%
- Drop-off in growth across > 2 percentiles

Bauchner, 1996; Gahagan, 1998; Schmitt, 1988; Zenel, 1997

Case 1: Failure to Thrive

- 2mo female child presented to UI Stead Family Children's Hospital with failure to thrive.
- Weight upon arrival was down 335g from birthweight.
- Medical work-up performed
- Gathered detailed history
- Consulted lactation consultant
- Multidisciplinary team meeting

Labs/Imaging

Comprehensive work-up completed. No underlying medical causes.

- Skeletal survey-negative
- Urine toxicology-negative
- Hair toxicology-positive for cocaine

Admission labs at UIHC:
- Significantly elevated ALT
- Low albumin
- Hypoglycemia

What if HC is critical in assessment

- 50% until 3 m/o
- 97% at 7 m/o
- >> 97% after 8 m/o
- Chronic SDH, developmental delay...

Full head to toe exam

- Neurological status
- Examine all skin (see TEN-4-FACES-P)
- Exam of oral cavities-frenas, broken teeth, bruising
- Fontanelles in babies
- Genital exam
- "What happened? How did you get this owie?" - Ok to ask open ended question. Document verbatim. Do not continue pressing questions or asking close ended questions as you may tamper with a future forensic interview.

Suspected physical abuse: Skeletal Survey

- Age 0-2 years: in all suspected cases.
  - Repeat a partial SS in 10-14 days (omit skull, pelvis and spine views). Often done locally
- Age 2-5 years: Consider in highly suspicious cases.
- After 5 years: X-ray only areas of specific concern.
- Disabled, immobile, multi-trauma patients of all ages: Skeletal survey in all suspected cases regardless of age
TRANSVERSE FRACTURES
- Bending extremity
- Direct blow to the point of fracture
  - Fall onto edge of an object
  - Blow onto extremity from an object

SPIRAL FRACTURES
Twisting forces involved
- Extremity held and twisted by someone
- Body fixated and extremity twists or vice versa
Torus/buckle fracture

Greenstick fracture

Metaphyseal/Corner/bucket handle fracture

HIGHLY SPECIFIC
- Metaphyseal fractures (Corner/Bucket handle)
- Posterior rib fractures
- Spinous process fractures (Vertebral)
- Scapular fractures (Shoulder blade)
- Sternal fractures (Chest bone)

Kleinman '98, Ricci '09
MEDICAL CHILD ABUSE
formerly Munchausen Syndrome by Proxy

- Definition: A child experiencing unnecessary and harmful or potentially harmful medical care at the instigation of a caretaker

Some Mimics of Physical Abuse

- Osteogenesis Imperfecta
- Metabolic bone disease
- Rickets
- Menkes Disease
- Glutaric Aciduria Type 1
- Henoch-Schonlein Purpura
- Bullous Impetigo
- Cupping
- Coining
- Congenital dermal melanocytosis
- Etc.

Part 3: Reporting Child Abuse

- Reporting decision relies on the suspicion of abuse and/or neglect
- First and foremost, ensure the safety of the child and staff
- Be professional, non-judgmental, non-accusatory with parents
- Discuss your concern and decision to report with parents
- Explain what is to follow after your report

Mandatory Reporting in Iowa

- If clinic SW available, you can ask for their assistance.
- Call central child abuse hotline at 1-800-362-2178 within 24 hours (preferably as soon after contact with the patient as possible) to file the oral report to DHS. Before filing the report, have ready as much of the information below as possible:
  - The historical and medical facts of the case.
  - The child’s, parents’, and alleged incident’s addresses, caretakers’ home and work phone numbers, dates of birth
  - The names and if possible addresses of everybody that may have been involved in the incident.
  - Siblings’ names, ages and whereabouts.
Mandatory Reporting in Iowa

- Document the name of the DHS intake worker taking (or rejecting) the oral report.
- Prepare the written child abuse report on EHR and have it faxed to DHS within 48 hours.
- The clinician that recognizes suspected abuse has the ultimate legal responsibility to make sure a report is made. If a difference of opinion amongst the professionals occurs, anyone may report the case to DHS.

Sibling Medical Assessment

- Recommend evaluation of other children under the care of suspect perpetrator.

Part 4: Follow-up

- Manage care of survivors
- Repeat skeletal surveys as indicated
- Long-term effect of ACEs
- Developmental follow-up
- Growth follow-up
- Coordinating specialist follow-up

Outpatient Child Protection Centers

- Below is a list of Iowa centers:
  - Child Protection Center – Unity Point Health Cedar Rapids (319) 369-7908 or (800) 444-0224 ext. 7908
  - Blank Children’s Hospital Regional Child Protection Center – Des Moines (515) 241-4311
  - Allen Child Protection Center – Waterloo (319) 226-2345
  - Mercy Child Advocacy Center – Sioux City (712) 279-2548 or (800) 582-0684
  - Mississippi Valley Child Protection Center – Muscatine (563) 264-0580
- Be familiar with local centers in the area you will practice in and their referral methods.

Follow-up in Primary Care

- Manage care of survivors
- Repeat skeletal surveys as indicated
- Long-term effect of ACEs
- Developmental follow-up
- Growth follow-up
- Coordinating specialist follow-up

References

- UIHC Child Protection Clinical Guidelines
Questions?

Email: anne-nielsen@uiowa.edu