Recognition of Child Abuse and Neglect

"The world is a dangerous place to live, not because of the people who are evil, but because of the people who don't do anything about it."

-Albert Einstein

Definitions of Child Abuse

- Physical Abuse:
  - Any act or failure to act on the part of a parent or caretaker which results in death, serious physical or emotional harm, sexual abuse or exploitation or
  - An act or failure to act which presents an imminent risk of serious harm.

Federal Child Abuse Prevention and Treatment Act (CAPTA), amended 2003

We're Not Talking About a Little Spanking

- 3.3 million referrals for 6 million children, 25% substantiated
- 47.2/1,000 children in the US
- Neglect = 59%
- Physical Abuse = 10.8%
- Sexual Abuse = 7.6%
- Emotional Abuse = 4.2%
- Medical Neglect = <1%
- 1,676 Fatalities
  - 63% from Various types of Abuse
  - 37% from Neglect
  - 42% <5y
  - 42% <1y

US Dept of Health and Human Services, Child Maltreatment 2009
The Perpetrators
- 81% are parents
- 6% other relatives
- 4% unmarried partners of parents
- 44% male, 54% female

The Reporters
- 16.5% Teachers
- 16.44% Law enforcement or lawyers
- 11.4% Social services staff
- 13% Medical Staff

US Dept of Health and Human Services,
Child Maltreatment 2009
**History of the Problem**

  - Only 302 hospitalized cases of diagnosed battered children in the US.
- 1965-1968 – States begin to pass legislation to require reporting of suspected abuse by healthcare professionals.
- 564 Articles in medline in the past year

Kempe et al. The battered child syndrome. JAMA. 1962;181:17
History

- Abuse has always been with us.
- Cultural and family contexts often make defining it problematic.
- Religious and secular laws were long based upon the concept of “reasonableness.”

One Man’s Abuse: Another Man’s Affection

- In America - Pro-incest and pro-pedophilia groups.
- North American Man/Boy Love Association (NAMBLA)
- Rene Guyon Society - Believe that children need sex with compassionate adults to reduce delinquency, suicide, gang warfare, and assault.
  - Slogan: “Sex by eight or else it’s too late.”

Cultural Differences

- Africa: Female circumcision
- Asia: Coining, women and girl children eat after men and boys
- Singapore: Caning
- Mid-East: Single woman stoned for adultery, married partner not charged.
Physical Abuse Risks

- Low socioeconomic status
- Family violence
- Unemployment
- Substance abuse
- Adolescent parenting
- Child with special needs

“I didn’t beat her, I just pushed her out of bed.”

- OJ Simpson

“Anyone with a grain of sense would know that if I punched my wife I would rip her head off. It's all lies. I have never laid a finger on her.”

- Mike Tyson

Did the child walk into the door?

- Discrepant history
- Multiple histories
- No history
- Inappropriate response to the severity of injury
- Implausible history
- History is vague or lacking in detail
- Injury is attributed to the actions of siblings
- Delay in seeking care
- A partial confession
Did the child walk into the door?

- Delay in seeking care.
- Crisis in abusers life.
- Unusually shy or avoidant behavior
- Avoidance of even innocuous physical contact
- Triggering behavior by child (excessive crying resulting in the abusive act).
- Prior history of abuse either in the child or the suspected abuser.

“He’s just accident prone.”

- Social isolation.
- Unrealistic expectations of the child.
- Objectification of the child.
- Pattern of increased severity of injury over time.
- Use of multiple hospitals or providers.
- History of abuse in siblings of the child.
- History of suspicious death in a sibling.

Other Clues

- Bruises and burns are the most common presenting injuries in cases of abuse.
- Other suspicious lesions:
  - Welts from belts or cords
  - Pinch marks
  - Slap marks
  - Cigarette burns
  - Scalding immersion burns.
Clues (continued)

- Spiral fractures in nonambulatory children.
- Intracranial hemorrhage.
- Duodenal hematomas.
- Pancreatic injury.
- Injury out of proportion to the history.

Emotional Abuse

- A natural byproduct of sexual or physical abuse.
- Exploiting or corrupting
  - Encouraging a child to develop inappropriate behaviors
  - Modeling, permitting or encouraging antisocial behavior
  - Terrorizing a child through unpredictable, chaotic, or recognizably dangerous circumstances

Hart et al., Journal of Emotional Abuse, Volume 1, No 1, 1998

Emotional Abuse

- Cruel/callous behavior or psychological stress
  - Physical or psychological illness may result.
- Threatening a child with severe, unreasonable punishment.
- Includes acts of omission and commission.
Emotional Abuse

- Ignoring
- Rejecting
- Isolating
- Terrorizing
- Corrupting
- Verbal assaulting

US National Center for Child Abuse and Neglect

- Emotional Maltreatment:
  - Verbal and emotional assault
  - Closed confinement
  - Inadequate nurturance/affection
  - Knowingly permitting maladaptive behavior

- Emotional Neglect:
  - Passive or passive/aggressive inattention to the child’s emotional needs, nurturing or emotional well-being.

Sequelaes of Physical or Sexual Abuse

- Aggressive and violent behavior.
- Guilt and/or Depression.
- Juvenile delinquency.
- Suicide or Homicide.
- Runaway behaviors.
- Abuse to other children.
- Poor academic performance.
- Prostitution, Promiscuity.
Prevention of Abuse

- Recognition of individuals or situations where risk exists.
  - Abused children have a 50% chance of suffering future abuse
  - 10% chance of ending up dead
- Teach children to tell someone when signs or suspicious situations occur.
- Home visitation by Child Protective Services.
- Parenting classes, hotlines, and crisis nurseries.

What Can We Do About It?

- Possible solutions
  - Abuse and neglect are often preventable by linking the parent(s) to a “buddy.”
  - Moms with home nurse visits abuse their children less, have higher quality personal interactions, fewer ER visits, better family planning, and longer birth interval.


Mandated Reporting

- Failure to report signs or suspicion of abuse is at least a misdemeanor in all 50 states
  - Chiropractors are named specifically in a least at few states’ laws
  - Class A misdemeanor for non-reporting
- “Good Faith” clauses for protection
- Keep your mind and your eyes open.
- Maintain a high index of suspicion
Recognizing Injuries of Abuse

- Skin Injuries (TEARS)
  - Tears
  - Ecchymosis
  - Abrasions
  - Redness
  - Swelling

Recognizing Injuries of Abuse

- Human Bites
- Falls
- Hair Loss
- Head Facial, Mouth Injuries
- Shaken Baby Syndrome
Patterns of accidental injuries

- Head injuries tend to involve the potential zone: occipital or forehead

- Abdominal injuries: more widespread and usually from trauma, often associated with infant abuse

- Fractures more common in children younger than one

Patterns of non-accidental injuries

- Usually involve the potential zone: occipital or forehead

- Often easily overlooked

- Location differs
  - Infants: genitalia, buttocks
  - Older Children: Often more than one, occurring at random, well-defined, often with a sucking injury. Often associated with assault or sexual abuse.

Patterns of Abuse

- Injuries are rare
- Navy blue indicates significant impact
- Green indicates minor impact
- Red indicates severe impact

Human Bites

- Usually Abuse
- Often easily overlooked
- Location differs
  - Infants: genitalia, buttocks
  - Older Children: Often more than one, occurring at random, well-defined, often with a sucking injury. Often associated with assault or sexual abuse.
Bruises

- Fresh Bruise (0-2 days) – red, swollen and tender
- 2-5 days: Deep blue or purple
- 5-7 days: Green
- 7-10 days: Yellow
- 10-14 days: Brown
- Younger the child, quicker the resolution.

Rules are Meant to be Broken

- Red is not a good indicator for acute bruising. May appear at any time during the evolution of a bruise.
- Blue and black cannot be used to estimate time of aging.
- Yellow may occur as early as one day.
- Green may occur as early as two days.
- Bruises of identical age and cause on the same person may not appear as the same color and do not change at the same rate.


Distribution of Bruises

Accidental

Abusive
Abusive Burns

- Somewhere between 2 and 30% of all childhood burns are abusive
- Scald
  - Immersion
  - Clear lines of demarcation
  - Little if any splash effect
  - “Donut” pattern
- Splash
- Contact Burns
  - Geometric Pattern
  - Deeper, larger, less exposed areas

Suspicious Fractures

- Unsuspected Fx surreptitiously discovered
- Skeletal injury out of proportion to history
- Multiple fx, symmetrical or in various stages of healing
- Skeletal trauma associated with other injuries to other body part

Fracture Healing

- 1-3 days: Sharp fracture edges, soft tissue changes
- 7-10 days: Soft tissue changes resolve
- 7-21 days: Indistinct fracture edges
- 10-14 days: Early callus; periosteal new bone
- 2-6 weeks: Callus matures, remodeling, fracture line gradually obscured
- 6wks-2yrs: Remodeling dependent upon pt’s age, nutrition, immobilization

Fractures with High Specificity for Child Abuse

- Characteristic metaphyseal fractures
- Posterior rib fractures
- First rib fractures
- Scapula fractures
- Spinous process fractures
- Sternum fractures


Fractures with Moderate Specificity for Child Abuse

- Multiple bilateral fractures
- Fractures of differing ages
- Epiphyseal separation – growth plate fracture
- Vertebral body fracture
- Digital fracture
- Complex skull fracture

Fractures with Low Specificity for Child Abuse

- Clavicular fracture
- Long bone shaft fracture
- Linear skull fracture


Hair Loss

- Traumatic: forceful pulling of hair or breaking of hair shafts by friction, traction or other physical trauma
- May be self-inflicted

Falls

- Falls typically result in only minor injuries
- Look for inconsistency
- Red flag: “Fell off the couch”
Deaths from Falls in Children: How Far is Fatal? (unwitnessed)

- 10' - 45' 118 1 death (CHI)
- 4' - 10' 65 0 deaths
- < 4' 100 7 deaths (CHI)
- 5/7 had signs of abuse (e.g. RH, fracture)

Chadwick, et al. Journal of Trauma, 1991 (San Diego)

Injuries from witnessed & corroborated free falls

- With independent witness
  - 106 falls < 2-70 feet
  - 3 small depressed skull fractures
  - 1 death after a 70' fall
- Without independent witness
  - 53 falls < 5 feet
  - 2 deaths

Williams. J Trauma, 1991

Injuries that result in intracranial trauma

<table>
<thead>
<tr>
<th>Falls &lt;3'</th>
<th>Falls &gt;3' &lt;6'</th>
<th>Falls &gt;6'</th>
</tr>
</thead>
<tbody>
<tr>
<td>Couch</td>
<td>Standing kitchen counter, chair, top of slide, bunk bed, stairs</td>
<td>Porch</td>
</tr>
<tr>
<td>Bed</td>
<td></td>
<td>Baby Walker</td>
</tr>
<tr>
<td>Coffee table</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Highly Unlikely</td>
<td>Unexpected but reasonable</td>
<td>Reasonable</td>
</tr>
</tbody>
</table>
Shaken Baby Syndrome

- John Caffey, 1972
- 3 Cardinal findings:
  - Retinal hemorrhages
  - SDH/SAH
  - Little to no external cranial trauma
- Red Flag: Unknown or vague etiology of neurological symptoms

Head Injuries are leading cause of traumatic death in child abuse
Homicide is the leading cause of injury related deaths in infants <4y
Serious injuries, especially fatal injuries, are nearly always non-accidental in infants
Evidence of prior abuse is common at dx
Evidence of prior cranial injuries is found in 33-40%

Shaken Baby Syndrome

- Signs can vary widely
- Poor feeding, vomiting, lethargy, irritability
- Look for concomitant injuries


Retinal findings after head trauma in infants & young children

- 79 children < 3 y/o
- Retinal hemorrhages present in only 3
  - all abused
- None of the children with accidental trauma had retinal hemorrhages


Shaken Baby Syndrome Outcomes

- Mortality: 15-38%
- If comatose on presentation, 60% died, had profound MR, spastic quadriplegia or severe motor dysfunction
- Seizures are common
- Cortical blindness

More common than realized

- 51 children <2yo admitted to an urban children’s hospital with injuries suspicious for abuse
  - Normal neuro exam
  - Received CT or MR if they were considered high-risk
    - Rib fx, multiple fx, facial injury, age <6mos
  - Occult neurological injury found on CT or MR in 37%.

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Munchausen Syndrome by Proxy

- Baron von Munchausen
  - German aristocrat
  - Devoted liar
  - Determined hypochondriac

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Munchausen Syndrome by Proxy

- Jennifer Bush
  - >200 Hospitalizations
  - >40 surgeries: appendectomy, cholecystectomy, partial ileostomy
  - Serial MSBP
Munchausen Syndrome by Proxy

- Typical profile:
  - All socioeconomic classes
  - Mom – 95%
    - Occasionally healthcare workers
  - Dysfunctional but intact family
  - Occasionally family hx of MSBP
  - Usually seem overly devoted, attentive, loving
  - Often have attempted suicide
  - Often repeat MSBP in other children


Munchausen Syndrome by Proxy

- 80% have a background in the health professions
- 80% have inflicted Munchausen Syndrome on themselves
- 80% have been under psychiatric care prior to MSBP diagnosis
- 60% of moms responsible have attempted suicide

Federal Bureau of Investigation Law Enforcement Bulletin, August 1995

Conditions Mimicking Abuse
Conditions that can Mimic Abuse

- Hematologic
  - Hemophilia
  - Idiopathic thrombocytopenic purpura
  - Von Willebrand’s Disease
  - Herroch-Schonlein purpura

- Accidental Trauma
  - Toddler’s Fracture
  - Stress Fx
  - Hair tourniquet
  - Misadventure

Conditions that can Mimic Abuse

- Dermatologic
  - Phytophotodermatitis
  - Mongolian Spots
  - Vascular malformations
  - Subcutaneous fat necrosis
  - Atopic dermatitis
  - Impetigo

Conditions that can Mimic Abuse

- Metabolic and/or congenital
  - Osteogenesis Imperfecta
  - Ehlers-Danlos Syndrome
  - Other Collagen Vascular Disorders
  - Insensitivity to pain
  - Rickets

- Folk Medicine/Cultural
  - Coining
  - Moxibustion
  - Cupping
Summary

- Pay attention to the little things
- Get a good history – RADAR
  - Routinely screen mothers and teenage girls who are dating (and all kids, for that matter)
  - Ask direct questions. Preface with “Because violence is so common, I’ve begun to ask about it routinely. Do you feel safe at home? Have you ever been pushed, hit or hurt by your partner or someone you love?
  - Document your findings. Body maps and quotes are good.
  - Assess patient safety.
  - Review options and referrals.

Summary

- Do a good and thorough examination (or arrange for one)
- Know when to have an increased index of suspicion
- When in doubt, err on the side of the child’s safety
- To Report suspected abuse:
  - Call the Office of Children’s Services
  - 1-800-478-4444
  - http://hss.state.ak.us/ocs/Publications/ReportingChildAbuse.htm
- Childhelp USA: 1-800-4-A-Child