CHILD MALTREATMENT IN PRIMARY CARE

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POCKET PEDIATRICS MEDICAL GROUP
DISCLOSURE

No disclosures
OBJECTIVES

- Define child maltreatment
- Understand the prevalence of child maltreatment
- Understand all the abuses that make up child maltreatment
- Understand the mandating laws of abuse for California
The Child Abuse Prevention and Treatment Act (CAPTA)

Any recent 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.
TYPES OF ABUSE

- PHYSICAL ABUSE
- SEXUAL ABUSE
- NEGLECT
- EMOTIONAL ABUSE
PREVALANCE

National Child Abuse and Neglect Data System (NCANDS)

- 2012 - 51 states reported 678,810 victims of child abuse and neglect
- 9.2 victims per 1,000 children
- Neglect – 78.3%
- Physical Abuse – 18.3%
- Sexual Abuse – 9.3%
- Boys – 48.7%
- Girls – 50.9%
- White – 44.0%
- Hispanic – 21.8%
- African American – 21.0%
CASE STUDIES

- 6 month old female
  - Left on bed or couch
  - Mother hears a thud
  - Sees and feels “lump” on the head
  - CT Scan shows skull fracture, small epidermal hematoma

- 3 year old
  - Left home alone
  - Mother out attempting to score
  - Child leaves apartment looking for food
  - Police found child wander alone on busy street
NEGLECT

Failure of parent, guardian, or caregiver to provide for basic need’s of child
- Physical – food and shelter or lack of supervision
- Medical – provide necessary medical and mental health treatments
- Education – failure to educate child or attend to special education needs
- Emotional – inattention to a child’s emotional needs, failure to provide psychological care, or permitting the child to use drugs and alcohol

NEGLECT

- Drug Use
- Alcohol Abuse
- Mental Illness
- Unrealistic Views of Child
- Poor Interaction with Child
- Poverty

- Unemployment
- TANF (CalWorks/AFDC)
- Larger Family
- Absent Father
- Poor Support System
- Stressors
NEGLECT

Failure To Thrive (FTT)
- Low weight for age
- Low weight for height
- Low BMI
- Drop in weight that is 2 SD
NEGLECT

CAUSES

- 20% Medical
  - Malabsorption e.g. Celiac
  - Thyroid
  - Renal
  - Hepatic
  - HIV
  - Neurologic
NEGLECT

Labs
- CBC
- Chemistry
- TSH
- UA
- Based on H&P

Imaging
- Bone Age
- Others based on H&P
NEGLECT

CAUSES – 80%

- Ignorance (incorrect mixture of formula)
- Infant’s Temperament/Missed Read Cues
- Parent issues
- Poverty
- Overwhelming Stress
- Maliciousness
## NEGLECT

<table>
<thead>
<tr>
<th>Observation</th>
<th>Multi-disciplinary</th>
</tr>
</thead>
<tbody>
<tr>
<td>◦ Feeding</td>
<td>◦ Nutritionist</td>
</tr>
<tr>
<td>◦ Parenting</td>
<td>◦ PHN</td>
</tr>
<tr>
<td>◦ Home</td>
<td>◦ SW</td>
</tr>
<tr>
<td></td>
<td>◦ Speech/OT</td>
</tr>
</tbody>
</table>

Hospitalization??
### CASE STUDIES

<table>
<thead>
<tr>
<th>17 month old twin girls</th>
<th>AA sisters 9 and 10 years old</th>
</tr>
</thead>
<tbody>
<tr>
<td>26 week premature, weighing 2.1 and 1.9#</td>
<td>9 yo PMH: Asthma, Allergic Rhinitis, Food/Environmental Allergies</td>
</tr>
<tr>
<td>PMH: ASV, VSD, ROP, RSV, RAD</td>
<td>10 yo PMH: Asthma, Atopic Dermatitis, Food Allergy, Seizure Disorder</td>
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<tr>
<td>Multiple cancelled and missed appointments</td>
<td>Asthma worsened with limited activity</td>
</tr>
<tr>
<td>Missed appointments with specialty clinics</td>
<td>Referral back to neurology</td>
</tr>
<tr>
<td>Parents 16 and 18 years; Mother’s PMH of Stage IV neonatal neuroblastoma and leg length discrepancy, surgical repaired</td>
<td>Reports seizures of both children</td>
</tr>
<tr>
<td></td>
<td>Demands wheelchairs and diapers</td>
</tr>
<tr>
<td></td>
<td>Letter to school</td>
</tr>
</tbody>
</table>
PHYSICAL ABUSE
CASE STUDY

- 18 month old male accompanied by mother
- Mother noted that patient hasn’t been moving right arm x 2 days
- Denies any trauma, “just seemed to have woken up with arm like that”
- Exam: patient cries with ROM and upper arm is swollen; also noted faint linear bruising on left cheek and ear with clearing
- Immunizations UTD, No PMH
SIGNS & SYMPTOMS IN PA

- Bruising/Welts
- Patterned
- Lacerations/Abrasions
- Fractures
- Burns
- Missing Hair
PHYSICAL ABUSE INDICATORS

PHYSICAL

- Unexplained bruises or welts
- Unexplained burns
- Unexplained fractures
- Unexplained lacerations or abrasions
- Intimate Partner Violence

BEHAVIORAL

- Wary of Adult Contact
- Apprehensive when other children cry
- Behavioral extremes: aggression or withdrawn
- Frightened of parents
- Afraid to go home
- Discloses injury by parents
- Easily startled
- Shows anxiety about normal activities
PHYSICAL ABUSE

Pierce et al (2010)

- Pilot study to identify discriminating bruising characteristics and to model those findings into a decision tool for screening children at high risk for abuse.

- Case-Control Study
  - PICU patients age 0-48 months
  - N = 48, abuse patient
  - N = 53, accidental trauma (control)

- Data Collection
  - Age
  - Race
  - Gender
  - Total number of bruises
  - Body location of bruising
  - Associated (nonskin) injuries, and stated cause of injury, as provided on the trauma sheet
PIERCE ET AL CON’T

Results
- Age
  - <4 months
- Location
  - TEN (torso, ear, neck)
  - Hands, Buttocks, Chest
  - ABD (seat belt sign indicative of intra-abdominal injury)
  - Genitourinary/Hip
- Number of bruises
  - Abusive trauma – 25
  - Accidental trauma - < 4
PIERCE ET AL CON’T

CART—classification and regression tree
MARKS from INSTRUMENTS

- Belt buckle
- Belt
- Looped cord
- Stick/whip
- Fly swatter
- Coat hanger
- Board or spatula
- Hand/knuckles
- Bite
- Sauce pan
- Paddles
- Hair brush
- Spoon
PHYSICAL ABUSE

- CBC
- CMP
- PTT/PT
- UA
- Tox Screen
- CK
- Trauma Panel
- Head CT
- Skeletal Survey
FRACTURES

History
◦ Age
  ◦ Under 1 year
  ◦ Greater than 5 years
◦ Mechanism
  ◦ Unwitnessed
  ◦ Minor trauma
  ◦ Significant trauma
◦ Location
  ◦ Humerus
  ◦ Skull Fracture
  ◦ Femur
  ◦ Rib
Fractures

Kemp et al (2008)

- Systemic Review
- 32 comparative studies of children under 18 years old that described the distribution of fractures identified on radiographs, in which the fractures resulting from physical abuse were compared with those from other causes
Fractures

**ABUSE**

- Multiple Fractures
- Rib Fractures
- Femoral Fracture, non-walkers
- Humeral Fracture, <3 years
- Mid-Shaft Fractures
- Skull Fracture

**NON-ABUSE**

- Supracondylar Fractures
- Parietal and Linear Skull Fractures
- Torus or Buckle Fracture
Patient presents to clinic and ED

Assessment of Risk factors
  1) Age < 18 months
  2) Physical And/Or Radiographic Evidence of Prior Trauma
  3) Suspicious History

Risk of Abusive Femur Fracture

<table>
<thead>
<tr>
<th>No. of Risk Factors</th>
<th>Probability</th>
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<tbody>
<tr>
<td>0</td>
<td>4.2%</td>
</tr>
<tr>
<td>1</td>
<td>24.1%</td>
</tr>
<tr>
<td>2</td>
<td>87.2%</td>
</tr>
<tr>
<td>3</td>
<td>92.3%</td>
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FRACTURES

X-ray
- Metaphyseal corner fracture or bucket handle fracture
- Considered pathognomonic for non-accidental injury.
- Mechanism is shearing motion
- Torus or Buckle Fracture
FRACTURES

Skeletal Survey

◦ A series of X-rays of all the bones in the body, or at least the axial skeleton and the large cortical bones.
Suggested Guidelines for Assessment for Suspected Physical Abuse

0-6 months:
- Hospital Admission
- Head CT (recommended in all)
- Skeletal survey
- Laboratory evaluation (CBC, PT, PTT, Trauma Panel, tox screen, UA)
- Photodocumentation of any injuries
- Social work consult
- File report w/ Child Protective Services
- Ophthalmology consult
- Pediatric Surgery consult

6 months-2 years:
- Hospital admission
- Neuroimaging
- Skeletal survey
- Laboratory evaluation (CBC, PT, PTT, Trauma Panel, tox screen, UA)
- Photodocumentation of any injuries
- Social work consult
- File report w/ Child Protective Services
- Ophthalmology consult
- Pediatric Surgery consult

2-5 years:
- Hospital admission if medically ill
- Neuroimaging
- Skeletal survey (only if extensive trauma, developmental delay)
- Laboratory evaluation (CBC, PT, PTT, Trauma Panel, tox screen, UA)
- Photodocumentation of any injuries
- Social work consult
- File report w/ Child Protective Services
- Pediatric surgery consult

5 years and older:
- Hospital admission if medically ill
- Neuroimaging
- Laboratory evaluation (CBC, PT, PTT, Trauma Panel, tox screen, UA)
- Photodocumentation of any injuries
- Social work consult
- File report w/ Child Protective Services
- Ophthalmology consult
- Pediatric Surgery consult

Clinical Indicators:
- Neuroimaging - decreased mental status, skull fracture(s), head injury
- Ophthalmology - positive neuroimaging, facial bruising, multisystem trauma
- Pediatric Surgery - based on institutional standards
SEXUAL ABUSE
16 yo Caucasian female accompanied by mother
- CC: vaginal pain
- HPI: C/O vaginal pain x 4 days; denies fever, dysuria, frequency, urgency or hematuria. +vaginal bleeding x 1-2 days, but none for past day or vaginal discharge. Denies sexual activity, but discloses went to party at friends home prior and drank, but doesn’t remember what may have occurred. Mother concerned that something happened so brought daughter to clinic.

16 yo Caucasian female accompanied by mother
- CC: vaginal pain
- HPI: patient discloses was at friend’s home at party and was sexually assaulted by boy she knows and doesn’t want anyone else to know, especially the police because the whole school will know what happened.
SEXUAL ABUSE

- Bruising
- Vaginal pain
- Vaginal bleeding
- Depression
- Cutting
- Suicidal ideation/attempt
- Anger
Adams et al (1994)
- 236 girls ages 8 months to 17 years
- Reviewed case files and colposcopic photographs of perpetrator convictions
- 63% of cases reported penile-vaginal contact
- Genital examination findings
  - 28% normal
  - 49% non-specific
  - 9% suspicious
  - 14% abnormal

- Case-control comparison study of 192 sexually abused VS 200 non-abused girls
- No statistical difference between the two groups in terms of anatomy
- Genital examine does not differ from abused and non-abused girls
SEXUAL ABUSE

Heger et al (2002)
- 5 year prospective study of 2384 children referred for evaluation of suspected sexual abuse
- Referred after disclose of sexual abuse, behavioral changes, exposure to abusive environment and possible medical conditions
- 96.3% of children had normal exam
- 95.6% reporting abuse, exams were normal
- 99.8% referred for behavioral issues or exposure of abuse, had normal exams

Kellogg et el (2004)
- Retrospective case review of 36 pregnant adolescents
- Reviewed historical information and photographic documentation
- 34 out 36 subjects or 94% had normal exams
- 2 or 6% had definitive exams of penetrations
SEXUAL ABUSE

Clinic Exam
- Ask open ended questions
- Last contact with suspect
- Acute Exam
  - Prepubescent – 72 hours
  - Pubescent – 7 days
- Non-acute
Mandating Laws

- ≤ 13 years, same age partner
- 14-15 years, no more than 2 years
- > 16 years, don’t have to ask
Mandating Laws

Mandating Reporters

◦ Social workers
◦ Teachers, principals, and other school personnel
◦ Physicians, Nurse Practitioners, Nurses and other health-care workers
◦ Counselors, therapists, and other mental health professionals
◦ Child care providers
◦ Medical examiners or coroners
◦ Law enforcement officers
Mandating Laws

- CPS (Child Protective Service)
- Local City Police Department
- Sheriff Department
Conclusion
REFERENCES


REFERENCES


Smith, B. L., & Kercher, G. A. (2011). *Adolescent sexual behavior and the law*. Crime Victims' Institute, Sam Houston State University.