Identification of Child Abuse in the Emergency Dept.
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Presentation to Emergency Department
- I Think My Child Has Been Abused
- Injured Child no history of trauma
- Symptom work up shows occult injury

Presentation
- Limited to Physical abuse in preverbal children

Who Is Here?
- Anyone working in Emergency Department
- Physicians working in child protection services
- Physicians
- Nurses Practitioners
- Nurses
- Social Worker
- Educators
- Researchers

Goal is the Sweet Spot
Use a process that appropriately identifies children that need further assessment and investigation.

Steps to child abuse screening and systematic implementation
- Nursing assessment at triage
- Medical assessment
- Indication for additional work-up and consultation
- Medical decision making
- Risk/safety assessment
- Disposition decisions: The safety plan
- Review some child maltreatment identification and management systems that have been studied and are in current use starting with those concerning identification in a specific injured child and ending with a population based screening tool for earlier identification and intervention of child abuse and risk thereof.
Criteria for consideration to initiate a Child Physical Abuse Assessment

- Age and development
- Non-mobile infant with any injury
- Injury inconsistent with Child’s Ability
- Statements of harm from a verbal child
- Injury
- Any injury in non-mobile child
- Uncommon injury for age group
- Occult finding
- Mechanism not plausible
- Multiple injuries, including involvement of multiple organs
- Injuries of different ages
- Pattern of increasing frequency or severity of injury over time
- Patterned cutaneous injuries
- Burns to genitalia, stocking/glove distribution, branding or pattern


Criteria for consideration to initiate a Child Physical Abuse Assessment: from the history

- Chief complaint does not contain caregiver’s concern for an injury and plausible history
- Caregiver response not commensurate with injury
- Unexplained delay in seeking care
- Lack of, inconsistencies, or changing history
- Inconsistencies or discrepancies in histories provided by involved caregivers.

The Escape tool

1. Is the history consistent? Yes No
2. Was seeking medical help unnecessarily delayed? Yes No
3. Does the onset of the injury fit with the developmental level of the child? Yes N. A. No
4. Is the behavior of the child, his or her caregivers and their interaction appropriate? Yes No
5. Are findings of the head-to-toe examination in accordance with the history? Yes No
6. Are there other signals that make you doubt the safety of the child or other family members? Yes* No

*If Yes describe the signals in the box ‘Other comments’ below.
Other comments

Fig. 3. Escape tool.

Child Abuse Detection

Emergency department - a delay www.englishlanguagelearning.com/spanish

Fig. 3. Process of Child Abuse Detection
Introducing a Clinical Pathway for Identification of Child Physical Abuse

Condition/Status:
- Any bruise/petechiae, burn, subconjunctival hemorrhage or frenulum tear in a child <6 months old
- Any bruise/petechiae or burn concerning for abuse in a child <6 months old
- Fracture in a child <6 months old
- Fracture concerning for abuse in a child <6 months old
- Intracranial hemorrhage in <1 year old (excluding an isolated contact extra/axial hemorrhage under a skull fracture)
- Intracranial hemorrhage in a child >1 year old which is concerning for abuse
- Other injury/injuries concerning for physical abuse, but not specified above
- Exposure to Intimate Partner Violence in a children <1 year old

Any bruise/petechiae, burn, subconjunctival hemorrhage or frenulum tear in a child <6 months old
- CBC, diff inc. platelets
- PT (INR)
- PTT
- LFTs
- Amylase =/or lipase
- Von Willebrand Screen *
- Factor VIII Assay *
- Factor IX Assay *
- Vitamin K * (newborn period)
- CPK, if extensive bruising or bruising of thigh/buttocks
- UA *for bruising/bleeding only.

Imaging and other work-up
- Survey, Non-accidental trauma
- Head CT without contrast
- Abd CT w/contrast if elevated LFT (AST or ALT >80IU/L) or amylase/lipase elevated or low hct.
- Pediatric Ophthalmology (retinal) exam.
- Consult Social work
- Consult TEDI Bear/Child Abuse Pediatric Team

Bruising patterns accidental vs. abuse

Pattern injuries APSAC Handbook

10/22/2019
Fractures in child <6m
- CBC, diff plt
- PT, PTT
- Lytes
- Calcium level
- Mg level
- Phosphorous level
- LFTs
- Amylase or lipase
- 25-OH Vit D panel
- PTH intact
- UA

Look at the fractures.
- If Differential diagnosis includes connective tissue disorders consider genetics consultation.
- Caffey’s disease aka Infantile Cortical Hyperostosis often affects the mandible, causing periosteal reaction and soft tissue calcification.
- Patients <18months with rib, tib/fib, humerus, or femur fractures are more likely to be victims of abuse than accidental injury. (J Ped Orthop sept 09.)
- Skull fractures are commonly caused by falls and more likely accidental in infancy if that is the history, but get a 3d CT of bony windows.

Assessment for suspected physical abuse in a child
- Step 1. Obtain a careful history of the alleged circumstances surrounding the injury.
  - Were there witnesses to the event?
  - Who was present with the child when the event occurred?
  - Was the alleged event accounted for the injury?
  - Is the child’s developmental level consistent with the proposed mechanism of injury?
  - Was there a delay in seeking medical attention?
  - Early in the process ask where the child has been for the past 24-48 hr (or more depending on the injury findings.)
- Step 2. Perform a complete examination with the child fully unclothed.
  - Document the overall clinical status of the child.
  - Document the presence of any bruises, burns, or other cutaneous findings.
  - Document the presence of any intra-oral injuries by carefully inspecting each frenulum (there are three.)
  - Document such findings as subconjunctival hemorrhage or tympanic membrane hemorrhage (hemotympanum.)
  - Photo-document the injuries including some sort of scale (a ruler.) Preferably 3 views; far, mid, near.

Assessment for suspected physical abuse in a child
- Step 3. Initiate a diagnostic work-up on the basis of the findings and clinical condition of the child. The child’s condition and the need for medical intervention may determine the order in which the diagnostic studies are obtained.
  - CT or MRI of head
  - CT abdomen with contrast enhancement if abd trauma is suspected or screening labs are positive.
  - Skeletal survey
  - Eye exam (photography?)
  - Step 4. Manage any acute medical problems
  - Step 5. Notify Child Protective Services as mandated by the state.
Hague Protocol


Inclusion criteria

Adults who, on questioning confirmed that they were responsible for the care of under aged children (irrespective of whether they were a parent, informal caregiver, or legal guardian) and who attended the ED for one of the following reasons were included:

A. IPV: This includes not only clear cut cases, but also cases where the adult patient denies being a victim of IPV but the ED professional has a strong suspicion that this is the case. They site the revised conflict tactics scale (Straus 1996.). All patients are included irrespective of the extent of the sustained injuries, severity of illnesses or depth of the wounds.

Inclusion Criteria (cont.)

- B. Suicide attempt or other serious psychiatric disorder. Patients who are seen after a suicide attempt or auto mutilation are included in the protocol, regardless of the amount of pills taken or the way the suicide was attempted and irrespective of the depth or size of the wounds in the case of auto mutilation.
- C. “Serious Substance Abuse” Patients seen after intoxication with hard drugs. [Psychoactive drugs that are addictive and perceived as especially damaging i.e., Ecstasy, Heroin, Cocaine and amphetamine] Patients who abuse alcohol or soft drugs are included if:
  - i. There appeared to be no adequate care for the children
  - ii. The other parent or family members indicated that the substance abuse has adverse effects on the domestic situation, or
  - iii. It appeared from the hospital records that the patient has previously been admitted several times following abuse of these substances.

The initial study

- 9 ED’s in 3 regions of the Netherlands (1 intervention group, 2 controls)
- Jan 2006-Nov 2007, prior to the protocol, 385,626 patients attending the ED resulted in 4 (1/100,000) referred to RCCAN
- After implementation of the protocol; 565/885,301 patients attending the ED (64/100,000) were reported to RCCAN
- Where the protocol was not implemented the # was 2/163,628 (1/100,000)
- At assessment Child abuse was confirmed in 91% of cases.
- Parental characteristics are strong predictors of child abuse.

DISCUSSION

- Download APP

An App: The Child Protector

Playstore

Child Protector
### CASES

<table>
<thead>
<tr>
<th>3 month old</th>
<th>6 month old</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Chief Complaint</strong></td>
<td><strong>Chief Complaint</strong></td>
</tr>
<tr>
<td>Mother states</td>
<td>Aunt States</td>
</tr>
<tr>
<td>“Rash on Bottom and Face”</td>
<td>“Cough and trouble breathing and sleeping a lot”</td>
</tr>
<tr>
<td><strong>Linear Parallel petter bruises noted</strong></td>
<td><strong>Left in Aunt’s care and Aunt decided to bring her in.</strong></td>
</tr>
<tr>
<td><strong>Physical Exam:</strong></td>
<td><strong>Physical Exam:</strong></td>
</tr>
<tr>
<td>Torn Lingual Frenulum</td>
<td><strong>Chest X-Ray:</strong> Bilateral 10&lt;sup&gt;th&lt;/sup&gt; and 11&lt;sup&gt;th&lt;/sup&gt; Rib fractures posterior lateral</td>
</tr>
<tr>
<td><strong>Diagnosis:</strong> Slap Marks</td>
<td><strong>Right side with callus formation</strong></td>
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<tr>
<td><strong>What is the work-up?</strong></td>
<td></td>
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