**HISTORICAL INDICATORS OF ABUSE:**
- No/vague explanation for a significant injury
- Important historical details change
- Explanation is inconsistent with the child’s physical/developmental capabilities
- Different witnesses provide different explanations
- Injury occurred as a result of inadequate supervision
- Delay in seeking medical care without reasonable explanation

**PHYSICAL EXAM FINDINGS SUGGESTIVE OF ABUSE:**
- Bruises in infants <4 months
- Bruising in unusual locations in any age child (e.g., ear pinna, under chin, torso, buttocks)
- Patterned bruises (e.g., loop marks, hand print)
- Bite marks
- Burns (e.g., cigarette burn, stocking/glove pattern, symmetric burn on buttocks, immersion burn, multiple burn sites)
- Facial injury (e.g., unexplained torn frenulum in non-ambulatory child, ear injury, unexplained facial bruising)
- Retinal hemorrhage

**ED MANAGEMENT**
- Social work consultation; DHS referral; Law enforcement involvement as indicated
- Document pictures of injuries in Epic; Des Moines Police Department photos for significant injury
- Skeletal Survey per guidelines (see back page)
- Occult Injury Screening per guidelines (see back page)
- Obtain retinoscopic images if possible
- Consult trauma services if presence of injury
- Consult orthopedics or neurosurgery as indicated
- Consider admission for significant injury, presence of occult injuries, or safety plan not established

**INPATIENT MANAGEMENT**
- Continued involvement with Social work, DHS, and Law Enforcement
- Consult STAR Center at 515-224-3300
- Ophthalmologic consult for significant intracranial pathology and/or clinical neurological impairment; Retinoscopic pictures if available.
- Consult Palliative Care for significant injuries/impairment with long-term consequences
- Continued consultation with trauma, neurosurgery, and orthopedics as indicated
- Screen for organic causes of injury:
  - For Fractures: Parathyroid hormone, 25 Hydroxyvitamin D, Serum Copper, Magnesium, Phosphorus
  - For Bruising and/or Intracranial hemorrhage: CBC, PT, PTT (if not done prior), PFA-100, vWF antigen, vWF activity, Factor VIII level, Factor IX level. Consider hematology consult.
- For significant intracranial pathology obtain Brain, Cervical, Thoracic, and Lumbar MRI without and with contrast if clinically stable
SKELETAL SURVEY RECOMMENDATIONS

CHILDREN 0-23 MONTHS IF ANY CONCERN FOR CHILD ABUSE OR ANY OF THE FOLLOWING FEATURES ARE PRESENT:

- Confessed abuse
- Injury occurring during domestic violence
- Impact from toy/object/young sibling causing fracture
- Delaying in seeking care >24 hours in child with signs of distress
- Additional injuries unrelated to fracture (i.e. bruising, burns)
- No history of trauma to explain fracture
- Fractures concerning for abuse (ex: rib fractures, metaphyseal fractures, complex skull fractures, femur fracture)

ALL CHILDREN 0-11 MONTHS WITH ANY TYPE OF FRACTURE EXCEPT THE FOLLOWING:

- Linear, unilateral skull fracture in a child >6 months with a history of significant fall
- Clavicle fracture likely attributed to birth

If distal radius/ulna buckle fracture or spiral fracture of tibia/fibula (Toddler fracture) present in a cruising or walking child with a history of a fall skeletal survey DOES NOT need to be routinely performed unless there are other clinical concerns for abuse.

EMERGENCY DEPARTMENT OCCULT INJURY SCREENING

IMAGING:

<table>
<thead>
<tr>
<th></th>
<th>0-11 months</th>
<th>12-23 months</th>
<th>2-18 years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Head CT</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Skeletal Survey</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Abd/Pelvic CT</td>
<td>Obtain if symptomatic or suggested by physical exam. Consider if &gt;10RBC on urine micro or ALT/AST &gt;80</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

LABS:

<table>
<thead>
<tr>
<th>Lab</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>CBC, CMP, Lipase, UA</td>
<td>All patients &lt;7 years; &gt;7 years if clinically indicated</td>
</tr>
<tr>
<td>PT/PTT</td>
<td>Bruising or intracranial hemorrhage</td>
</tr>
<tr>
<td>Urine Drug Screen</td>
<td>As clinically indicated</td>
</tr>
</tbody>
</table>

Resources:

4. Infographic permission: [https://www.luriechildrens.org/globalassets/media/pages/research/tricam/ten-4/ICH-2698-ten-4-facesp-card_3x2_lr.pdf](https://www.luriechildrens.org/globalassets/media/pages/research/tricam/ten-4/ICH-2698-ten-4-facesp-card_3x2_lr.pdf)
6. UnityPoint Health Trauma. “Practice Management Guideline: Non-Accidental Trauma.” [https://www.unitypoint.org/desmoines/filesimages/Services/Trauma/Trauma%20Guidelines%202017/Pediatric%20NAT%20Guideline.pdf](https://www.unitypoint.org/desmoines/filesimages/Services/Trauma/Trauma%20Guidelines%202017/Pediatric%20NAT%20Guideline.pdf)