

Clinical Guideline

Subject: Physical abuse screening in the pediatric patient

Last Reviewed / Revised Date: June 20, 2013

Applies to all listed below:

Limited to those specified:

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| <input checked="" type="checkbox"/> Blodgett Hospital | <input checked="" type="checkbox"/> Butterworth Hospital |
| <input type="checkbox"/> Outpatient Non-Surgical Centers | <input type="checkbox"/> Outpatient Surgical Centers |
| <input checked="" type="checkbox"/> Helen DeVos Children's Hospital | <input checked="" type="checkbox"/> Resident and Specialty Practices |
| <input checked="" type="checkbox"/> Aero Med | <input type="checkbox"/> Occupational Services |
| <input type="checkbox"/> Urgent Care Centers | |
| <input checked="" type="checkbox"/> Emergency Services | |

Purpose: To define criteria that will prompt abuse screening in patients who are less than 18 years of age and to outline the recommended response to concerns about pediatric physical abuse.

Responsibility: Registered nurses, Care Managers (medical social worker), physicians, physician assistants, nurse practitioners.

Guideline Content:

I. Include child physical abuse in differential diagnosis when:

- A. "Red Flag" Medical history given
 1. Child reports a history of having been injured or assaulted.
 2. There is no history of a traumatic event in a child with physical injuries.
 3. Injuries are not consistent with stated injury event.
 4. Child is not developmentally capable of stated injury event (especially pre-walkers).
 5. History of injury event changes substantially over time (especially if the history changes as more injuries are found).
 6. History of injury event lacks expected detail.
 7. There is a delay in calling 911 or seeking reasonable medical care, beyond our expectations of a reasonable caregiver.
 8. Inappropriate parent-child interaction (witnessed or reported).
 9. Signs of medical neglect: immunizations not up-to-date, missed well child visits, no identified primary care physician.
 10. Indications that responsible caregiver was under the influence of alcohol or drugs at the time of the injury.
 11. History of seeking health care from multiple sites and settings.

- B. "Red Flag" Physical exam findings
 1. Any bruise in an infant or child who does not pull to stand. For walking children, any bruise in an unexpected location (especially Ears, Neck, Abdomen, Genitals). Bruises, marks, or scars in patterns suggesting inflicted injury (whipping, branding, "slap marks", etc.) Small bruises over forehead, cheek bones, elbows/extensor forearms, lumbar spinous processes, and shins are often caused by minor accidents in walking children.

2. Burns not consistent with stated or presumed injury (especially “dip” pattern burns or burn patterns suggestive of branding).
3. Acute or healing intra-oral injuries (including frenulum tears) not explained.
4. Rapidly enlarging head circumference or macrocephaly in infants.
5. Genital or anal injuries not adequately explained.
6. Any other significant injury not adequately explained.

C. “Red Flag” Radiographic findings

1. Metaphyseal fractures (bucket-handle, corner, chip)
2. Rib fractures (especially posterior)
3. Any fracture in a non-ambulating infant or child
4. Multiple fractures
5. An unexpected finding of a healing fracture
6. Complex skull fractures, epidural hematoma (EDH), subdural hematoma (SDH), subarachnoid hematoma (SAH), brain contusions, cerebral edema, and anoxic/hypoxic brain injury not well-explained by injury mechanism, especially in young children.
7. Evidence of brain injury in different stages of healing not adequately explained.
8. Any other significant injury not adequately explained.

II. **Immediate response, including addressing patient safety**

If child requires admission for medical/surgical care, follow outline below.

If child is appropriate for discharge from the emergency department/urgent care, refer to policy “Suspected Child Abuse and Neglect, ADM-S00-S0276”.

(Please note that the below recommendations can be ordered on the “Center for Child Protection (CCP) Peds” Power Plan in Cerner.

- A. If physical abuse has entered the differential diagnosis, but is considered **unlikely**, consultation with medical social worker (Care Management) and the Center for Child Protection can be requested without immediate referral to Children’s Protective Services.
- B. For all other cases, the child’s safety must be immediately addressed:
 1. A hospital staff person will supervise the patient at all times until further protective agreements are made.
 2. Consult Care Management.
 3. Order completion of “Parent and Visitor Safety Agreement” by Care Management or a designee.
 4. Order a Parent/Family/Visitor Interaction Log
 5. If physical trauma is identified prior to admission, admit patient to the Pediatric Trauma Service, with appropriate specialist consults as needed.
 6. If admitted to non-surgical service such as Pediatric Hospitalists, PCCM, or Primary Care Physician, then consultation is **required** with appropriate surgical service such as Trauma, Neurosurgery, Orthopedic Surgery, and/or Burn.
 7. For patients admitted to a surgical service consider consultation with Pediatric Hospitalists or Primary Care Physician for medical coordination of care.
 8. Care Management or a designee will refer child to Children’s Protective Services (Call Central Intake: 1-855-444-3911). Complete and fax “DHS 3200 form” to CPS. Also fax “DHS 3200 form” to Center for Child Protection - fax number: (616) 391-3206. Consultation with Center for Child Protection / Child Abuse Pediatrics: do not delay notification (even

during off hours). Business Hours: CCP Office (616) 391-1242. After Hours: CCP Pager (616) 479-5858.

9. The attending physician or a designated resident physician/advanced practice provider will assist Care Management in the completion of Children’s Protective Services referral “DHS 3200 form.”
10. Primary Care Physician must be notified of admission.
11. Care Management or a designee will inform parent/caregiver of CPS Referral and Consultations (as ordered).

III. Recommended evaluation for additional injuries in cases of suspected physical abuse:

- A. All children with physical abuse on differential diagnosis need a thorough physical exam, including the visualization of the entire skin surface, retinas, external auditory canals and tympanic membranes, nose, mouth and throat, genitals and anus.
- B. Possible Medication/Toxin exposure
 1. Any child with altered LOC or other symptoms of medication/toxin exposure:
 1. Comprehensive urine drug screen on earliest urine available in lab.
 2. Plasma drug screens as clinically indicated.
 3. Testing for specific toxins as clinically indicated.
- C. Possible head injury
 1. CT Head and c-spine recommended for:
 - a. Child with altered level of consciousness.
 - b. Infants under 12 months with other abusive injury.
 - c. Moderate or severe soft tissue injuries to the head or neck.
 2. MRI brain (in lieu of CT) recommended for:
 - a. Child with consistently normal neurologic exam over time, who needs screening for abusive head trauma.
 - b. Child with consistently normal neurologic exam over time, suspected to have been strangled within past 5-7 days.
- D. Possible Fracture
 1. Skeletal Survey for all pre-verbal children (under age 2-3 or developmentally delayed).
 2. Specific films for areas of pain, soft tissue injury, or deformity in children of any age.
- E. Possible Abdominal Injury
 1. CT abdomen/pelvis recommended for:
 - a. Child with symptoms of abdominal injury (anorexia, nausea and vomiting, abdominal pain, blood in stool, etc.)
 - b. Child with signs of abdominal injury (decreased or absent bowel sounds, abdominal bruising, abdominal distention/rigidity, pain tenderness with abdominal palpation).
 2. If child does not have indication for immediate CT abdomen/pelvis:
 - a. Labs to screen for abdominal trauma recommended:
 1. AST, ALT, amylase, lipase, UA for blood.
 2. Consider stool occult blood testing.
 3. CT abdomen/pelvis if lab screens abnormal.

a. Recommended evaluation for specific injuries:

- A. Head Trauma
 - a. MRI brain, c-spine, t-spine, and l-spine (non-contrast unless requested by Radiologist).
 - b. Ophthalmology consult.

- c. CBC, PT, aPTT immediately. Additional coag work-up at the direction of CCP and/or Hematology.
- B. Skull Fracture
 - a. Consider 3D reconstruction of skull. Necessary data is often still present on CT computer and can be transferred to PACS if requested.
- C. Other Fracture
 - a. CMP, Ionized Calcium, Phosphorus, 25-Hydroxy Vitamin D (Total)
 - b. Consider screening for disorders of copper metabolism in infants at the direction of CCP.
- D. Bleeding or Bruising
 - a. CBC, PT, aPTT immediately. Consider CPK for severe bruising. Additional work-up at the direction of CCP and/or Hematology.
- E. Visible (cutaneous or mucosal) injuries
 - a. Ensure Center for Child Protection is aware of need to photo-document injuries.

Clinical guidelines have the potential to improve health outcomes and reduce costs. However, what is best care for the majority of patients, as recommended in the guideline, may be inappropriate for the individual patient. Physicians must continue to use good clinical judgment when deciding when to follow the guideline. (Woolf SH, Grol R, Hutchinson A, Eccles M, Grimshaw J. Clinical guidelines: Potential benefits, limitations, and harms of clinical guidelines. *BMJ*. February 20, 1999; 318(7182):527-530.)

Spectrum Health reserves the right to alter, amend, modify or eliminate this guideline at any time without prior notice and in compliance *with Administrative Policy: Policy and Procedure Structure, Standards and Management*.

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- References:**
1. Administrative Policy: Suspected Child Abuse and Neglect ADM-S))-S0276
 2. American Academy of Pediatrics Policy Statement: Diagnostic Imaging of Child Abuse. Section on Radiology. *Pediatrics* 2009; 123:5 1430–1435.
 3. American Academy of Pediatrics Policy Statement: Evaluation of Suspected Child Physical Abuse. Nancy Kellogg and COCAN. *Pediatrics* 2007; 119:6 1232–1241.
 4. Child Abuse Medical Diagnosis and Management, 3rd Edition. Ed. RM Reece and CW Christian. American Academy of Pediatrics, 2009.
 5. State of Michigan Department of Human Services. Child Protection Law (Act No. 238, Public Acts of 1975, section 722.621-722.638, Michigan Compiled Laws). Lansing, MI: Author.
 6. American College of Surgeons, Committee on Trauma. Resources for optimal care of the injured patient 2006.