Evaluation Pathway for Children with Suspected Physical Abuse/Neglect in the Pediatric Emergency Department

The following information is intended as a guildeline for the acute management of children with suspected physical abuse (non accidental trauma). Management of your patient may require a more individualized approach.

History & Injuries that Raise Concern for Physical Abuse/Neglect

Injuries Concerning for Physical Abuse:

1. Sentinel Injuries: non-ambulatory child with physical findings (including burns)
2. TEN-4:bruising to the torso, ear, or neck or any bruising on an infant **≤ 4 months of age**
3. TEN-4 FACESp:Torso, ear, neck (TEN), frenulum, angle of jaw, cheeks (fleshy), eyelids, subconjunctivae (FACES), and patterned (p) in a child **less than 4 years old**
4. Unexplained fracture in any child, a fracture in non-ambulatory child, or a previoulsy unknown healing fracture
5. Skull fracture and/or intracranial injury in a child **< 12 months**
6. Any child with patterned bruising
7. Any child present during a domestic violence incident

History that would suggest a concern for child abuse/neglect:

- Delay in seeking care
- Changing history
- No known/observed history to explain the injury
- History inconsistent with child's developmental skills
- Implausible history (e.g., "maybe the dog bruised the 2 mo "I think the pacifier caused the injury", "car seat was too tight and left bruises")

History needed to clarify concerns for possible abuse/neglect:

- When was the last time the child/infant was well?
- Is there a mechanism of injury that was observed?
- Who first noted the injury/concern and what was their response?
- When did the caregiver decide to access medical care and why?

Last Revision: 3/14/24

Does the patient meet any of the above concerns?

NO → Off Pathway

YES → **Notify Peds ED Attending of Concerns***

***Activation of pathway at discretion of PED attending**

Medical Provider (Resident/Attending/APP) performs the following tasks:

- Perform history and physical
- Photodocument injuries in Haiku
- Consult pediatric trauma if patient has physical injuries (Consider Trauma Activation; **Appendix A** on next page)
- Page Beacon 123-4100
- Page Case Management or Social Work to complete the psychosocial assessment
  - Daytime: 919-347-1838; 11p-7a: 919-923-8995

Case Manager (CM) or Social Worker (SW)

- Discuss psychosocial assessment and reporting decision with the medical team
- Report to DSS +/- law enforcement
- Notify DSS of anticipated disposition
- Clarify DSS screening decision/safety plan
- Document all of the above using the Smartphrase: .**childabusedocumentation**

Disposition Huddle

- PED attending
- PED resident
- Forensic Nursing
- Beacon
- Pediatric Surgery

SHOULD THE PATIENT BE ADMITTED?

Medical Providers

- Enter orders based on Beacon and Pediatric Surgery guidance (**Appendix B**)
  - Utilize ED PEDS CHILD ABUSE ORDER SET
- Consult specialty services as appropriate based on Beacon and Pediatric Surgery guidance

Reporting Tips

- DSS contact info by county https://www2.ncdhhs.gov/DSS/local/
- After hours/weekends: Call 911 or the specific county's Sherrif's Office and ask for the CPS Social Worker on call
- Make DSS report in the county of child's primary residence
- Make law enforcement reports to jurisdiction where injuries occurred
- Use non-medical language to describe injuries
- Specify concern for physical abuse and/or neglect
- Connect the medical findings to the harm or risk of harm to the child (further injury, death, etc)
- Say "I don't know" (instead of "No") if you don't have that information.

YES

Medical Providers

- Enter orders based on pathway/Beacon guidance
- Admit to surgical service (**Appendix C**)

→ Admit

NO

CM/SW

- Confirm that DSS is aware of plan to discharge
- Confirm DSS discharge safety plan
- Document utilizing Smartphrase: .**childabusedocumentation**

Medical Providers

- Discuss discharge plans with CM/SW and child's caregiver
- Document plan in provider note

→ Discharge

Appendix A. Pediatric Trauma Criteria V.20220520

PEDIATRIC RED TRAUMA (AGES 0 - 15)

AIRWAY
- Intubation prior to arrival (scene & interfacility transfer)
- Need for emergent airway

BREATHING
- Respiratory compromise/distress/failure

CIRCULATION
- Age-specific hypotension at ANY TIME:
  - AGE 0 - 10: SBP < 70 mmHg + (2 x age in years)
  - AGE > 10: SBP < 90 mmHg
- Receiving blood or vasopressors
- Penetrating injuries (including GSW and stabbing) to the head, neck, chest, abdomen, pelvis, or proximal to knee

DISABILITY
- GCS < 9 or deteriorating by 2 with traumatic MOI
- Intracranial hemorrhage with midline shift
- Suspected spinal cord injury with neuro deficits or limb paralysis
- Neurovascular compromise/tourniquet of any extremity
- Drowning or hanging

ED ATTENDING OR TRAUMA SURGEON DISCRETION

PEDIATRIC TRAUMA CONSULT (AGES 0 - 15)

- Multiple injuries but does not meet RED/YELLOW criteria
- Isolated head injuries not meeting RED/YELLOW criteria
- Suspected NAT requiring admission
- Medicine admission with injuries
- Injured patient being considered for transfer to another hospital (including Hillsborough)

ED ATTENDING OR TRAUMA SURGEON DISCRETION

PEDIATRIC YELLOW TRAUMA (AGES 0 - 15)

SPECIFIC TRAUMATIC INJURIES
- GCS 9 - 13 and stable/improving with traumatic MOI
- Open or depressed skull fracture
- Significant, blunt maxillofacial trauma
- Intracranial hemorrhage not meeting RED criteria
- Focal neck or spinal pain with significant MOI
- Pneumothorax or hemothorax
- Crush injury to chest or pelvis
- Pelvic fracture
- Confirmed solid or hollow organ injuries
- 2 or more long bone (femur or humerus) fractures
- Any open long bone fracture (femur or humerus)
- Animal bites to the head, neck, chest, abdomen or pelvis not meeting RED criteria
- Burns with known or suspected trauma not meeting RED criteria

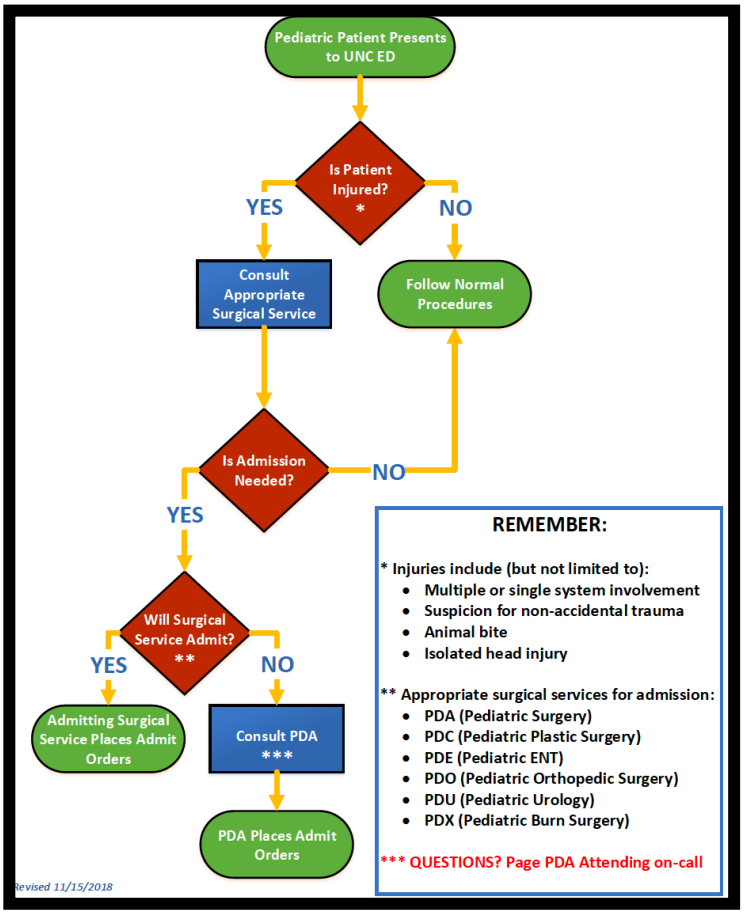
HIGH-RISK MECHANISM OF INJURY
- MVC with patient ejected
- MVC with death or severe injury of same-car occupant
- ATV or motorbike ejected
- Car vs. pedestrian or bicycle
- Falls > 2 stories or 20 feet
- High energy electrical injury
- Explosion
- Near-drowning

ED ATTENDING OR TRAUMA SURGEON DISCRETION

Appendix B. Physical Abuse Workup Considerations

Imaging Considerations	• Neuroimaging (non-contrast head CT ***or*** non-contrast rapid MRI **see Appendix D**) to rule out intracranial injury, particularly if <12 mo with neck, face, ear, or scalp injuries; vomiting or altered mental status • Abd/Pelvis CT with IV contrast if sx/signs of abdominal trauma or AST or ALT >80 or high clinical suspicion • Skeletal survey if <2 yo and suspicious fractures, bruises, or other injuries (not available on nights/weekends unless Peds Radiology Attending in house)
General Physical Abuse Labs	• Urine tox (may be bag urine, please obtain ASAP prior to pain medication/sedation if possible) • UA (non cath) for occult abdominal trauma • AST/ALT
+Bruising/Bleeding/ Neurological sx Labs	• CBC • Coags (PT/PTT/INR) • VWF activity, VWF antigen • Factor VIII level, Factor IX level • Subdurals add: D-dimer, Fibrinogen
+Fracture Labs	• 25-OH Vitamin D • PTH • Calcium, magnesium, phosphorous, alkaline phosphatase

Appendix C. How to Admit an Injured Pediatric Patient



Appendix D. Imaging of Mild Head Injury

CT imaging of mild head injury should be considered when intracranial injury is suspected and:
a. Hemodynamic instability
b. Patient is going to the OR emergently for any reason
c. High suspicion of a mass lesion (i.e. blown pupil or lateralizing exam)
d. Palpable deformities of the scalp or skull are present or there is an open laceration/fracture
e. Practitioner's discretion on level of suspicion of intracranial injury and urgency of intervention or patient stability

Trauma Rapid MRI (multiple plane T2 + SWI) of hemodynamically stable mild head injury patients with supplemental multiple view XR for skull fracture evaluation should be considered when intracranial injury is suspected and:
a. Consciousness is normal to mildly depressed
b. Patient is hemodynamically stable
c. Patient is not likely to proceed emergently to the OR
d. Mechanism is suggestive of potential for intracranial injury such as high velocity or significant fall
e. Clinical findings such as neurological deficit or scalp/skull deformity are present in the absence of a correlative history to suggest a traumatic mechanism.
f. Practitioner's discretion on level of suspicion of intracranial injury and appropriateness of Rapid MRI