MultiCare
BetterConnected

NON-ACCIDENTAL TRAUMA (NAT) SCREENING and MANAGEMENT GUIDELINE (Inpatient and Outpatient)

"Red Flag" History of Present Injury
- No history or inconsistent hx
- Changing history
- Unwitnessed injury
- Delay in seeking care
- Prior ED visit
- Domestic Violence in home
- Premature infant (< 37 weeks)
- Low birth weight/IUGR
- Chronic medical conditions

"Red Flag" Physical Exam Findings Infant
- Torn frenulum
- FTT (weight, length, head circumference)
- Large heads in infants (consider measuring of OFC in children < 1 yr)
- Any bruise in any non-ambulating child - "if you don't cruise you don't bruise"
- Any bruise in a non-exploratory location {especially the TEN region-Torso (area covered by a standard girl's bathing suit), Ears and Neck} < 4yrs old (TEN-4)
- Bruises, marks, or scars in patterns that suggest hitting with an object

"Red Flag" Radiographic Findings
- Metaphyseal fractures (corner)
- Rib fractures (especially posterior) in infants
- Any fracture in a non-ambulating infant
- An undiagnosed healing fracture
- SDH and/or SAH on neuro-imaging in young children, particularly in the absence of skull fracture < 1 year

<u>Recommended evaluation in cases of suspected physical abuse</u>

Note: If patient presents at any MHS Hospital other than Mary Bridge Children's Hospital, with "Red Flag" findings, please call the MBCH Emergency Department at (253) 403-1418 to arrange transfer for complete NAT workup.

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Laboratory

General for most patients:
- CBC & platelets; PT/PTT/INR
  (if concern of low/falling Hgb, repeat in am with retic)
- CMP
- Lipase
- Urinalysis – Dip, send for microscopic

If fractures are present:
- Phos
- PTH
- Vit D 25-OH

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Radiology
- Skeletal survey for < 2 years old (with 2 week follow up)
  - In ED if needed for disposition; or
  - Within 24 hours of admission
- Head CT (non-contrast with 3D reconstruction) if
  - < 6 months of age and other findings of abuse
  - Bruising to face or head injuries AND < 12 months of age
  - Neurologic symptoms < 12 months of age (including soft symptoms such as vomiting, fussiness)
- Abdominal CT if
  - S/Sx of abdominal trauma
  - ALT or AST if twice normal

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Consults
- Crisis Intervention Social Work
- Call CAID if diagnosis of abuse or likely abuse at:
  - 403-1478, Monday-Friday 8 am to 5 pm; if after hours, leave a message and call will be returned when they return
  - 403-1418, MB ED, after hours and weekends (they can reach the CAID Medical Director if necessary)
- Report to Child Protective Services if:
  - Injuries are severe and above diagnosis is clear cut and/or
  - There are other young children in the same home
- Pediatric General Surgery for trauma evaluation
- If Head CT abnormal and abuse is being considered, call
  - Neurosurgery
  - Ophthalmology for retinal exam*
  - Neuropsychology
  - Child Advocacy

*An Ophthalmology consult for a dilated eye exam is not necessary as part of the evaluation for physical abuse IF ALL OF THE FOLLOWING CRITERIA ARE MET:
- NORMAL head CT or CT with only a single, simple non-occipital skull fracture
- NORMAL mental status/neurologic exam

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Disposition
- If any suspicion of NAT has been raised during the ED encounter, a face-to-face care team "huddle" must take place prior to ED discharge. All members involved in the patient's care should participate including (at a minimum) the ED physician, ED RN and Social Worker.
- For suspected abusive head trauma NAT cases that require admission as clinically indicated with either Intracranial abnormality identified on head CT or suspected seizures from abusive head trauma:
  - Medical/Surgical trauma service admission with Q4 hour neuro checks for further child abuse work up
  - Consider PICU admission for:
    - Any child with intracranial injury/bleed or skull fracture(s) identified on head CT
    - Any child with normal head CT/no seizures but GCS < 15
- For suspected NAT cases not involving head trauma, admission to Medical/Surgical or PICU after injuries are reviewed by ED MD and Pediatric General Surgeon as medically indicated.
- Prior to hospital discharge: care team "huddle" including all members involved in the patient's care. Phone communication between may be utilized as necessary.
- Outpatient CAID follow-up as needed.

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Communication
- Inform parents if a CPS Referral has been filed and/or if Child Advocacy is consulted.
- Be direct and objective. Inform parents inflicted trauma is part of diagnostic consideration.
- Keep the focus on the child. Avoid appearing judgmental. Assure parents of thoroughness of evaluation.
- If you are unable to have this conversation with the parents, ask SWS or a senior colleague to do so.