

NON-ACCIDENTAL TRAUMA (NAT) SCREENING and MANAGEMENT GUIDELINE

History of Present Injury

CONSIDER NAT

- . No history or inconsistent hx
- Changing history
- Unwitnessed injury
- Delay in seeking care
- Prior ED visit for injuries
- Chronic medical conditions
- Domestic Violence in home
- High risk social behaviors in home
- FTT (weight, length, head circumference)
- Injury not compatible w/patient's stage of development
- Aggressive or neglectful caregiver behavior observed
- Large heads in infants (consider measuring of OFC in children < 1 vr)

"Red Flag" Physical Exam Findings Infant

- Torn frenulum without explanation
- Any bruise in child < 5 months "if you don't cruise you don't bruise"
- Any bruise in the TENP region-Torso, Eyes, Ears, Neck, and Perineum < 4yrs old (TENP-4)
- Bruises, marks, or scars in patterns that suggest hitting with an object
- Any burn in pre-mobile or younger infant, stocking/glove distribution, or genital/perineal areas

"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
- Non-Linear, Depressed, or Non-Parietal skull fracture

Recommended evaluation in cases of suspected physical abuse

- Consult Trauma (or Activate Major Trauma if meets criteria)
- Admit to trauma Pediatrics / PICU Consult
- Initiate comprehensive workup as note below

WORK UP

Laboratory

- CBC; PT/PTT/INR; D-Dimer
- (if concern of low/falling Hgb, repeat in am with retic)
- CMP
- Lipase
- Urinalysis Dip, send for microscopic Urine pregnancy in girls ≥8
- Tox Screen

FRACTURES PRESENT:

- Phos
- PTH
- Vit D 25-OH

Radiology

- Skeletal survey for < 2 years old (with 2 week follow up) within 24 hours of admission (Do not hold in ED for completion)
- 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); Elevated D-Dimer
- Abdominal CT if
- o S/Sx of abdominal trauma
- ALT or AST if twice normalElevated Lipase

Consults

• Trauma

Pediatrics / PICU

Social Work

Pediatric Forensics

Child Life

- SAFE team for patients suspected of sexual assault
- 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 CPS NUMBER 800-442-4918
- o Additional Consults may be warranted as dictated by injuries (consider Ortho, Neurosurgery, ENT, etc.)

Disposition

- If any suspicion of NAT has been raised during the ED encounter, a face-to-face care team "huddle" must take place to clarify details of the encounter. All members involved in the patient's care should participate including (at a minimum) the ED physician, ED RN and SW
- Patients will admit to complete work up and obtain full consultations
- PICU admissions to be considered when altered mental status, skull fractures, intracranial bleeds are identified
- Prior to hospital discharge: care team "huddle" including all members involved in the patient's care. Phone communication between may be
 utilized as necessary.

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.