Appendix 2.

Physical Abuse Screening & Treatment Guideline

Consider child physical abuse when: If any positive "Red Flags", Consult CPS

"Red Flag" Medical History	"Red Flag" Physical Exam Findings	"Red Flag" Radiographic Findings
• There is no history of trauma in a child with physical injuries. • The history provided for the injuries is not consistent with the development of the child (especially pre-ambulating children and nonverbal children) • The history of how the injuries occurred changes (especially if the history changes as more injuries are found) • There is delay in calling 911 or seeking reasonable medical care • Injuries inconsistent with stated mechanism	• Any Bruise in a child under 6 months of age- "if you don't cruise, you don't bruise" • Any bruise ANY TEN-4-FACESp bruising in a child <4 years old. TEN-4-FACESp bruising includes: Torso, Ear, Neck, Frenulum, Angle of Jaw, Cheek, Eyelid, Sclera, Patterned bruising • Bruises, marks, or scars in patterns, suggesting hitting with an object • Torn frenulum • Bulging fontanel • Burns poorly explained, patterned or immersion	• Metaphyseal fractures (bucket-handle, corner, chip) • Rib fractures (especially posterior) • Any fracture in a non-ambulating infant • Multiple fractures, especially with different rates of healing • An unexpected finding of a healing fracture • Unexplained intra-abdominal injury in a child <4 years old. • SDH and/or SAH on neuroimaging in young children, without history of significant trauma.

Recommended evaluation in cases of suspected physical abuse:

Laboratory General for most patients: 1. ALT, AST 2. Consider urine toxicology screen	If main is bruising or intracranial hemorrhage 1. CBC; PT/PTT/INR (if concern of low/falling Hgb, repeat in am with retic) 2. If extensive bruising, consider measuring CPK If bruising/bleeding more than expected, but non-specific in patter, consider additional evaluation for possible bleeding disorder, contact hematology.	Multiple or unusual/atypical fractures: 1. Calcium, phosphorus, Mg, Alk Phos, 1-Oh vitamin D, parathyroid hormone 2. If bones abnormal on X-ray, consider 25-hydroxy Vitamin D battery; very rarely consider DNA for collagen A1, A2/mutation for OI

Radiology

1. Skeletal survey <2 yrs.
2. Head CT (non-contrast with 3D reconstruction) if:
   a. Any concern for abuse and <6 months old
   b. <12 months old with moderate or high concern for abuse.
   c. Abnormal mental status, bulging fontanel, seizures, ALTE, vomiting >1 episode.
3. Abdominal CT if:
   a. s/sx of abdominal trauma
   b. >80 IU/L ALT or AST
   c. Bruising to abdomen or torso

Consults • Notify Law enforcement to assist in photographing injuries • Social worker and PCP should be consulted on ALL cases • Consider consulting Children's Hospital Child Protection Team through One Call.	If Head CT abnormal and abuse is being considered, call: • Primary care physician • Neurosurgery • Social work • Opthalmology for retinal exam* • Neurology if seizures suspected (routine EEG indicated in some age groups)

*An ophthalmology consult for dilated eye exam is not necessary as part of the evaluation for physical abuse head CT without intracranial hemorrhage.

Disposition

1. Any child with intracranial abnormality identified on Head CT or with suspected seizures from abusive head trauma will have pediatric trauma surgeon consult and neurosurgery consult – consideration for transfer for PICU if needed
2. Any Child with normal head CT/no seizures but with GCS <15 should have pediatric trauma surgeon consult with consideration for transfer.

Communication

1. Tell parents if child welfare is consulted and why
2. Be direct and objective. Tell parents inflicted injury is part of diagnostic consideration
3. Keep the focus on the child. Avoid appearing judgmental. Assure parents of thoroughness of evaluation.
   a. "We have identified (injury) in your child, which is not what we would expect after (given history). Whenever we find unexpected injuries, we do testing to be sure we are not missing other injuries or medical issues that could put your child at risk in the future".
   b. (Optional) I want to be sure that no one is hurting your child.