

# UW CHILD PROTECTION PROGRAM GUIDELINES

## TABLE OF CONTENTS

Indicators of possible physical abuse
Guidelines for non-accidental trauma evaluation
Age specific guidelines
Sexual abuse
Documentation
Specific injuries 9
Specific injuries
Bruising algorithm
Sentinelinjuries algorithm
Quick Reference Workup Chart
References



Indicators of Possible Physical Abuse

Indicators of Possibl	e Physical Abuse		
	the possibility of physical al	ouse if ANY of these are pres	sent:
history of bruising or bleeding from the mouth before pt is independently mobile inconsistent with the chīld's developmental skills inconsistent with the severity of the child's injury no history of trauma delay in seeking medical attention changes over time or with different caretakers	r the possibility of physical al  Developmental  alleged self-injury in an infant <six "spoiled"="" (references="" activity="" being="" by="" caregiver="" children="" commands="" crying)<="" developmentally="" expectations="" fractures="" history="" humeral="" in="" inappropriate="" infant="" months="" non-supracondylar="" not="" of="" old.="" or="" responding="" stop="" td="" to="" unexpected="" young=""><td><ul> <li>high-risk social factors         (example, history of intimate partner violence, chaotic social situation, alcohol or other drugs of abuse issues         (AODA), mental health problems, chaotic home environment).</li> <li>risk of abuse is substantially increased in the care unrelated adult male such as mother's boyfriend</li> <li>inconsistent or chaotic child care arrangements</li> <li>young, immature parents</li> <li>noor parenting skills</li> </ul></td><td><ul> <li>multiple injuries when history implies only one injuries more serious than expected from history</li> <li>"patterned" injuries.</li> <li>cutaneous injuries on a "noncruising" infant.</li> <li>injuries in unusual locations for unintentional trauma (ears, face, neck, palms/soles; padded and protected areas e.g. inner thighs, buttocks, chest, back and abdomen).</li> <li>Toddlers run into things</li> </ul></td></six>	<ul> <li>high-risk social factors         (example, history of intimate partner violence, chaotic social situation, alcohol or other drugs of abuse issues         (AODA), mental health problems, chaotic home environment).</li> <li>risk of abuse is substantially increased in the care unrelated adult male such as mother's boyfriend</li> <li>inconsistent or chaotic child care arrangements</li> <li>young, immature parents</li> <li>noor parenting skills</li> </ul>	<ul> <li>multiple injuries when history implies only one injuries more serious than expected from history</li> <li>"patterned" injuries.</li> <li>cutaneous injuries on a "noncruising" infant.</li> <li>injuries in unusual locations for unintentional trauma (ears, face, neck, palms/soles; padded and protected areas e.g. inner thighs, buttocks, chest, back and abdomen).</li> <li>Toddlers run into things</li> </ul>
changes over time or with different caretakers inconsistent with the mechanism of injury sibling or pet is blamed for injury prior suspicious injuries prior history of referral to Child Protective Services prior evaluation for maltreatment history of inconsistent well child care or compliance with medical care		<ul> <li>voung, immature parents</li> </ul>	back and abdomen). Toddlers run into things and incur bruises over anterior bony prominences such as knees and shins. injuries in different stages of healing (do not attempt to "date" bruises) infant fracture(s) intraoral injuries in non- cruising infant infant with signs/symptoms potentially associated
caregiver blames patie for injury multiple visits to medical sites for persistent crying/fussiness history of disciplining child less than 1 years age	g a		with head injury (e.g. mental status changes, persistent vomiting, irritability) and no obvious cause.  • infant presents with no history of trauma or minor history of head trauma, but has signs/symptoms potentially associated with intracranial injury significant acute lifethreatening event (ALTE) without a probable/feasible etiology



#### **Child Protection Program Coverage Information:**

## **Important Contact Information:**

Dr. Barbara Knox: Pager	Cell:
Amanda Palm, PA-C: Pager	Cell:
Jessica Wipperfurth, CPP Social Works	er (Hours: M-F 8-4:30pm):
Pager:	

SHOULD IT BE DETERMINED THAT THE CHILD NEEDS OUTPATIENT CLINIC FOLLOW-UP WITH THE UW CHILD PROTECTION PROGRAM, PLEASE NOTIFY DR. KNOX OR AMANDA PALM SO CASES CAN BE APPROPRIATELY SCHEDULED.

ALL CASES OF SUSPECTED CHILD MALTREATMENT NEED TO BE REPORTED TO THE COUNTY CHILD PROTECTIVE SERVICES (CPS) AGENCY WHERE THE CHILD RESIDES. (If the child resides outside of the state of Wisconsin, report to Dane County Child Protective Services, per hospital policy).

County Child Protective Services in the State of Wisconsin: http://dcf.wisconsin.gov/children/cps/cpswimap.HTM

Dane County Child Protective Services Reporting Line: 608-261-5437
After hours: 608-255-6067

ADDITIONALLY, CASES OF SUSPECTED CHILD MALTREATMENT ALSO NEED TO BE REPORTED TO LOCAL LAW ENFORCEMENT WHERE THE INCIDENT OCCCURRED (per hospital policy).

Law Enforcement:	
Contact UW Paging (	to assist in finding the needed phone numbers for law
enforcement.	1

\*\*\*Because specific clinical scenarios vary, these guidelines are not intended to be applied rigidly to every child. Consideration of multiple factors may influence clinicians in their diagnostic decisions. Please contact Child Protection Program directly regarding questions about these guidelines. These guidelines do not supplant other guidelines regarding when to consult other services such as trauma/surgery, neurosurgery, radiology, ophthalmology, plastic surgery, ENT, gynecology, social work, or orthopedics. Even when child maltreatment is suspected, other services should be consulted per policies and procedures.\*\*\*



## **Guidelines for Nonaccidental Trauma Evaluation**

## Child Protection Program Consultation

These guidelines are not intended to replace consultation with the Child Protection Program, but should be used as a guide in the initiation of work-ups. A consult order should be placed in Healthlink for all cases of suspected child abuse and/or neglect with known or suspected physical injury and the Child Protection Program on-call provider should be notified by phone.

Strongly consider contacting the Child Protection Program team through paging under certain circumstances, including but not limited to the following:

- Pre-cruising infant with fractures, mouth injury, bruising, or burn.
- Concern for abusive head trauma.
- Burn patient who will be going to the OK within the next 24 hours
- Suspected abuse case being admitted to the hospital.
- Suspected abuse with patient likely to die within the next 24 hours.
- Investigators involved and wish to discuss case directly with Child Protection Program.
- Preverbal children who have suspicious injuries but are returning to the environment where the abuse may have occurred.
- · Provider has questions about implementation of guidelines

In addition, consult Social Work routinely if child maltreatment is a consideration. During business hours, the Child Protection Program social worker will be involved in all Child Protection consults. After hours and on weekends, the on-call social worker should be consulted.

## Reporting

In all cases with reasonable suspicion of child abuse/neglect, mandated reporters are legally obligated to report to county child protective services and/or Law Enforcement (although hospital policy advises dual reporting to both CPS and LE).



#### **Evaluation for Injury**

The medical history is an important part of injury evaluation as it must be correlated with any injuries detected on exam or diagnostic studies. The medical history also allows screening for previous history of suspicious prior "sentinel" injuries such as bruising or mouth injury in a non-mobile infant. The physical examination should consist of a careful head to toe exam when abuse is suspected. Small bruises may have significant implications depending on the age and developmental stage of the child. Bruises are <u>often</u> missed on the ears, behind the ears, eyelids, scalp, under the arms, between the legs, and on the hands/feet. Sentinel injuries, such as a bruise or intraoral injury in a non-mobile infant, are often precursors to more serious forms of child abuse such as abusive head trauma or fractures. Early recognition of abusive injuries such as a small bruise in a non-mobile infant is an important abuse prevention strategy. Keep in mind that the child abuse medical work up is a type of injury surveillance and that absence of additional injuries on the work-up should not lessen the concern for abuse, particularly in a pre-cruising infant with poorly explained injury.

Consider other types of child maltreatment when one type is present. Occult injury, such as fractures, visceral injury, and chemical injury are common in maltreated children. It is particularly important to consider drug exposures in children presenting with unexplained altered level of consciousness, teens suspected of being sexually assaulted, and young children (under 5 years old) with injuries that are likely due to abuse. While a drug screen with a rapid turn-around time may be needed to guide medical treatment, it has limited forensic value. The Urine Drug Screen is less sensitive and less specific than the preferred GC/MS Drug Screen. When obtaining a specimen for drug screening in a case in which there may be legal implications, always perform a GC/MS Drug Screen as well as a cannabinoids level. (Refer to the guidelines on p. 7 and 10 regarding drug testing in children.)

#### Child Physical Abuse Evaluation: Age-Specific Guidelines

## Infants – not yet "cruising" (pulling to stand and taking steps)

#### Evaluation

Young infants are a special population in terms of child abuse evaluation. They are not yet independently mobile (crawling, cruising, or walking) and therefore rarely sustain unintentional injuries. Neurologic examination of young infants is not a sensitive way to screen for neurologic injury. Standardized assessment tools such as the Glasgow Coma Scale (GCS) have limited utility in this population.

Findings that should raise concern for abuse in infants include, but are not limited to, bruising, fractures (possible exception in cases of short falls and simple linear parietal skull fracture), and oral injuries/mouth bleeding. In addition, infants who have been abusively head injured may present with non-specific symptoms such as rapidly enlarging head circumference, vomiting, sleepiness, irritability, or decreased oral intake.



Injuries inconsistent with the history provided or a history that does not make sense developmentally (e.g. 2 week old infant described as rolling) should raise concerns for abuse.

## Workup

Because of the diversity of presenting complaints and the likelihood of concealed injuries, if child abuse is suspected in an infant 6 months old or less, a "full work-up" is recommended. In children ages 6 months to 1 year, a "full work-up" is strongly recommended and the UW Child Protection Program should be involved in the decision if not performing a full work-up is being considered.

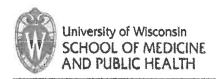
- ➤ CT Scan of head with 3D Reconstruction (including thin cuts and without contrast). In addition to the initial head CT, head MRI should be performed in all cases where abusive head trauma is likely. An MRI of the total spine is also recommended in these cases which is used to detect occult traumatic injury to the spine and is not intended to "clear" the C-spine. Please refer to trauma guidelines for information on C-spine imaging. If head CT shows intracranial injury:
  - Consult Neurosurgery, Hematology, trauma/surgery team, and Physical Medicine & Rehabilitation.
  - Consult Ophthalmology. Clear with Neurosurgery service BEFORE dilating pupils for eye exam. A dilated eye exam should be done as soon as possible after admission.

## Initial Skeletal survey with skull films.

- Consider nuclear medicine bone scan in addition to skeletal survey if screening for occult fractures is needed immediately to protect the child.
   Recommend calling Child Protection team prior to ordering bone scan.
- Repeat skeletal survey in 2 weeks (omit skull films), please contact Amanda
   Palm for assistance in coordinating this follow-up imaging test.
- o If fractures are present, "bone labs" should be performed: calcium, magnesium, phosphate, alkaline phosphatase, intact parathyroid hormone, 25-OH-Vitamin D.
- Screening for occult abdominal trauma with medical history and thorough physical exam.
  - o Obtain laboratory screen (AST and ALT)
  - Abdominal CT if AST and/or ALT  $\geq 80$
  - Abnormal screening labs should prompt consult of trauma/surgery team

#### > Cutaneous injuries

- Any bruising in this age group should raise concern for abuse.
- Injuries should be thoroughly and carefully documented in the medical record
- When possible, avoid vague terminology such as "marks" or "lesions".
   Bruises should be documented with regard to color, location, presence or absence of swelling, and blanching with pressure.



- o Infants with bruises should be evaluated for coagulopathy with coagulation studies (CBC with diff, PT/INR, PTT, Factor VIII, Factor IX, Von Willebrand Factor Activity, and Von Willebrand Factor Antigen. Platelet function screens for any child age one year or older.
- Obtain photographs of any suspicious cutaneous injuries if possible (see photodocumentation section)
- Consult Ophthalmology. If Head imaging is negative, yield of dilated ophthalmologic exam is generally low. However, consider Ophthalmology consult if head CT is negative for intracranial injury but patient has significant facial, orbital or periorbital injury, and/or other signs of abusive head trauma (AHT) such as rib or metaphyseal fractures noted, or patient has an abnormal neurologic exam.
- $\triangleright$  Head circumference should be documented in all children 0 24 months.
- Urine Drug Screen AND GC/MS Drug Screen.

## Cruising Infants/Toddlers (~1 year-24 months)

Follow guidelines for infants 6 months and under except for the following:

- ➤ Head CT is not routinely performed in this age group evaluated for child abuse. However, if the neurologic exam is abnormal, if there are head/facial injuries indicative of abuse, or if there are injuries from severe abuse, head CT should be performed as described above.
- Carefully assess developmental abilities to determine if cutaneous injuries (e.g. non-patterned bruising over bony prominences) may be consistent with the child's developmental abilities. Concerning bruises (i.e. patterned, on unexpected areas such as buttocks or abdomen, or inconsistent with developmental abilities) should prompt evaluation for child abuse.



## Children 24 months - 5 years

Children in this age group are generally independently mobile and therefore may be injured unintentionally during the course of their routine activities. However, these children may also be abused. The following should be considered in this age group:

- > Skeletal surveys are not routinely performed in this population but should be considered if index of suspicion for severe abuse is high. Examples of children in this age group for whom skeletal survey may be indicated include (but are not limited to):
  - Children with significant developmental delay
  - Children who are the victims of severe abuse, including those with mental status changes which render them unable to indicate pain or possible injury.
- Abusive fractures should prompt laboratory studies for bone health.
- > Children in this age group may be the victims of abusive head trauma. They should be evaluated as described above.
- Concerning bruises should be carefully documented and laboratory studies done as described above.
- ➤ All children in this age group with significant concern for abuse should be screened for occult abdominal trauma. Note that abdominal trauma may be present even in the absence of abdominal bruising.

## Children 5 years and older

Children in this age group are generally able to communicate any pain or describe how injuries occurred. Abdominal exams may be more reliable in this age group. This may decrease the need for aggressive testing for occult injuries, such as abdominal labs or skeletal surveys. Follow guidelines for children 24 months – 5 years old, omitting automatic screening for abdominal trauma and urine drug investigation unless clinically indicated. Follow bruising algorithm for concerning bruises. These children may also be candidates for forensic interviews conducted in an appropriate setting. Children with developmental delay or who are unable to communicate may require more detailed work-up.

## Child Sexual Abuse Evaluation

If a child is referred to the child protection program for concerns of sexual abuse, the child should be seen by Dr. Knox or PA Amanda Palm. In the absence of Dr. Knox or Amanda Palm, first ask when the child last had contact with the alleged maltreator. If the child has had contact within the last 72 hours the child should be referred to the Meriter-SANE program for evidence collection. (If the child is inpatient a SANE nurse can be requested to come to AFCH). If it has been over 72 hours since last contact, an appointment can be made for the child to be seen during clinic hours. This can be scheduled by any of the Child Protection Program team members during normal business hours.



## **Child Physical Abuse Evaluation: Documentation**

## **Photography Guidelines**

Whenever possible, photodocumentation of visible injuries should be obtained. Physicians covering the child protection program after hours should take photo documentation of any visible injury using the child protection program camera which can be found in office H4/477. Photos with and without a photo ruler should be obtained. Please include patient identification information including; Patient name, MR#, DOB, date of service, and time and please have your first photograph include this with a picture of the child's face. All pictures can be left on the program camera and given to the program social worker for storage as necessary.

## Written documentation of visible injuries

Careful documentation of all injuries in the medical record should be done:

- Avoid the use of vague terminology such as "marks" or "lesions." Use specific medical terminology, such as "bruise" or "abrasion" if it is known.
- Describe all injuries carefully, including color, size, location, blanching/non-blanching, swelling, and tenderness.
- > Use body diagrams if needed.
- Include child's description of how injury occurred (e.g. "I got hit with a belt").
- Avoid "dating" or "timing" bruises.

#### Other documentation

The medical records in physical abuse cases will become part of the legal case going forward. Therefore, it is extremely important to document all interactions.

- Include quotes whenever possible.
- Avoid speculation regarding mechanism of injury.
- While it is acceptable to state the medical opinion about the likelihood of abuse in documentation, doing so will increase the chance that the provider will be part of any legal actions. If there is uncertainty about the cause of the injuries, it is often best practice to state that there is a concern for child maltreatment then defer medical opinion to the Child Protection Program medical director (Dr. Barbara Knox).



## **Special Populations**

## Drug Testing: Occult and Overt Drug Endangered/Exposed Children

Children who reside in homes with significant parental drug use/abuse are at increased risk for abuse/neglect, as well as for direct exposure to drugs. Occult drug exposure in abused children may be as high as 15%. Consult social work for all patients with known drug abuse issues (in the home or AODA issues for the child). Consider age-appropriate child abuse work-up\_for children at high risk of exposure to illicit drug use/abuse.

For all children being medically evaluated with concern of drug endangerment, order BOTH a Urine Drug Screen AND a GC/MS Drug Screen. Cannabinoids screen/confirmatory testing should also be specifically ordered as the GC/MS Drug Screen does not detect THC/Marijuana. If hair follicle testing is requested, please contact Dr. Knox or Amanda Palm on the next business day.

The following scenarios warrant evaluation for possible drug exposure:

- Abused children under 5 years of age.
- > Any child with unexplained altered level of consciousness.
- A child or teen who has been sexually assaulted, especially if the history is vague. If there is suspicion of drug-facilitated sexual assault, test for "date rape drugs," e.g. Rohypnol, GHB, Clonazepam (orders in the Child Abuse order set).
- > Child brought in from home with known substance abuse and/or drug manufacturing (e.g. methamphetamine).
- > History of accidental ingestion.
- > Strange behavior with no explanation.
- Children physically involved in domestic violence disputes.
- Poorly explained burns (possible drug lab).

## Infants/Children Exposed to Domestic Violence

There should be a low threshold for performing some or all of a child abuse work-up for children who are being seen after having been "involved" in a domestic violence incident. Children who live in homes where there is domestic violence are at significantly increased risk for abuse. Contact the Child Protection Program for guidance on work up.

## Sibling/Contact Abuse

Siblings/contacts of physically abused children should be treated as suspected child abuse and evaluated based on age-specific guidelines, except that head CT for infants 1 year or under should be done only if index of suspicion is high, such as an infant sibling of an abusive head trauma index case.



## **Specific Injuries**

## **Abusive Head Trauma (AHT)**

Abusive head trauma (formerly "shaken baby syndrome") presents primarily in infants ages two to six months old, although it can present at any time in childhood. Findings may include subdural or subarachnoid bleeding, retinal hemorrhages, bruising, fractures, and change in level of consciousness/brain injury. The workup for AHT is primarily summarized in the age-specific guidelines. It is vital that the following consults be placed for all cases of suspected AHT:

- > UW Child Protection Program
- Neurosurgery
- > Hematology
- Physical Medicine and Rehabilitation
- > Trauma/Surgery
- Ophthalmology
- > Orthopedics (if fractures)
- Social Work (if after hours/weekend/holiday)

#### **Bruises**

See bruising algorithm.

#### Burns

Although burns may occur accidentally in children, a careful history must be sought. Findings that raise concern for intentionally inflicted burns include (but are not limited to):

- **Location**: hands, feet, genitals, and buttocks
- > Pattern: sharply delineated borders, absence of splash burns, uniform degree of burn injury, symmetrical burns, and large surface area burns
- ➤ **History inconsistent** with mechanism of injury, either because of developmental abilities or description of causative agents.

It is important to carefully document details of injury. If patient presents with burns that are concerning for abuse, follow age-specific guidelines.

#### Nursemaid's Elbow

Radial head subluxation is a fairly common injury in children who are independently mobile. It is an unexpected injury in young infants who cannot ambulate ("precruisers"). Consider evaluation for child physical abuse in infants with radial head



subluxation. Consider performing x-rays prior to attempting to reduce this injury.

#### Abdominal Trauma

With evidence of abdominal injury (abdominal bruising, unexplained vomiting, abnormal abdominal exam) and no clear history of accidental trauma, follow age-specific guidelines. Note that significant, life-threatening injury to viscera may be present in child abuse cases without specific symptoms or abdominal bruising.

## Oral Injury

Oral injuries in non-mobile infants are highly concerning for child physical abuse. Examples of oral injuries include frenulum tears, tongue lacerations, posterior pharyngeal trauma, and oral burns. Oral injuries may occur accidentally in children who are independently mobile, but they may also be inflicted in this age group. Follow age-specific guidelines in evaluating oral injuries.

## Fractures (extracranial)

With fracture(s) and no clear and plausible history of accidental trauma, follow age-specific guidelines, including "bone labs." For other musculoskeletal injury such as non-physiologic subperiosteal new bone formation (SPNBF) or unexplained musculoskeletal injury complete full age-appropriate work up.

### **BRUISING ALGORITHM**

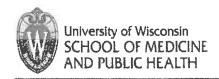
\* "Cruising" is defined as pulling to a stand and "walking" while holding onto stationary objects (e.g. furniture), which usually occurs between 7 and 12 months of age. Crawling is not considered cruising.

#### I. Non-cruising Infants

- Generally, <u>all</u>bruises should be considered suspicious regardless of location unless it is clearly and plausibly explained, and over a bony prominence.
  - a) Full work-up (including coagulopathy screen and photographs)

## II. Cruising or Walking Infants and Children

- 1) Accidental bruises are typically located over bony prominences such as knees, shins and forehead.
- 2) Bruises in padded or protected areas such as the face, ears, neck, hands.

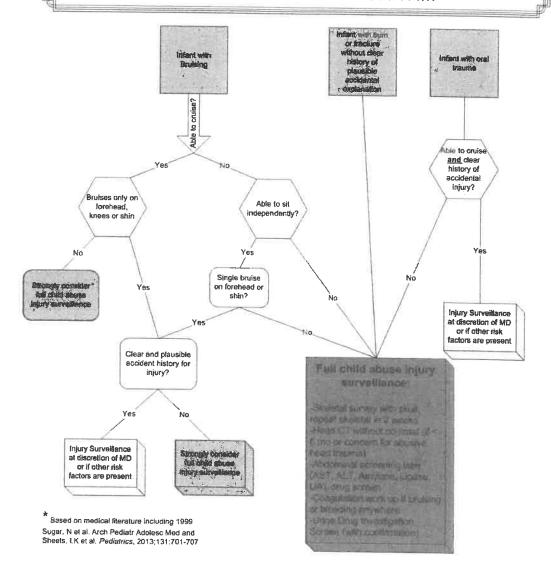


feet, chest, abdomen, back, buttocks, upper arms, and inner or posterior thighs are not common in normal activities and abuse should be considered especially in very young children or those who have a predominance of bruises in atypical locations. Ear (pinna) bruises should be considered highly suspicious in any age child.

- 3) Patterned bruises, including loop-shaped injuries and linear bruises, should be considered highly suspicious.
- 4) Work-up for suspicious bruises:
  - a) Labs for occult abdominal trauma if  $\leq 5$  years old (consider abdominal CT if labs are abnormal)
  - b) Coagulopathy screen to include CBC with diff, PT/INR, PTT, Factor VIII, Factor IX, Von Willebrand Factor Activity, Von Willebrand Factor Antigen. Platelet function screens should be included for any child one year or older.
  - c) Photographs
  - d) Head CT if under 6 months of age, strongly consider head CT if 6 months - 1 year of age, based on clinical findings. The UW Child Protection Program should be involved if a decision is made to NOT perform a head CT on a child between the ages of 6 months - 1 year.
  - e) Skeletal survey if under 2 years of age or clinical concern for fractures



# SENTINEL INJURIES IN INFANTS: BRUISING AND INJURY GUIDELINE ALGORITHM\*





## Quick Reference Workup Chart

	Infant < 6mo	Infant/Child 6-24 mo	Child 2-5 years	Child > 5 years
Full Exam	Yes	Yes	Yes	Yes
Skeletal Survey	Yes	Yes	If highly suspicious of severe abuse	If highly suspicious of severe abuse
Head CT	Yes	Strongly consider*	If neuro exam abnormal	If neuro exam abnormal
"Abdominal Labs"	Yes	Yes	Yes	If Abdominal Trauma
"Bone Labs"	If Fracture	If Fracture	If Fracture	If Fracture
Coagulation Studies	If Bruising	If Concerning Bruising	If Concerning Bruising	If Concerning Bruising
Head Circumference	Yes	Yes	N/A	N/A
Urine Drug Investigation	Yes	Yes	Yes	No
Ophthalmology Consult	If Head Injury	If Head Injury	If Head Injury	N/A

Chart created by Dr. Maren Lunoe

<sup>\*</sup>Head CT should be strongly considered in any child ages 6 months -1 year with concern of abuse. The UW Child Protection Program should be involved if the decision is made to NOT perform a head CT in this age group.

<sup>-&</sup>gt; Note that children with developmental delays may not follow these guidelines

<sup>-&</sup>gt; See written guidelines for further details. This chart does not replace the guidelines



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