

Sentinel Injuries and the Importance in Preventing Future Deaths

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Objectives



Review definition



Introduce CPS expectations



Discuss medical evaluation



Provide case examples

definition

[def-uh-nish-uh n]

noun

1. the act of defining, or of making something definite, distinct, or clear.
2. the formal statement of the meaning or significance of a word, phrase, idiom, etc., as found in dictionaries.
3. the condition of being definite, distinct, or clearly outlined.

optics. sharpness of the image formed by an

n.

⁴ Television. the accuracy of

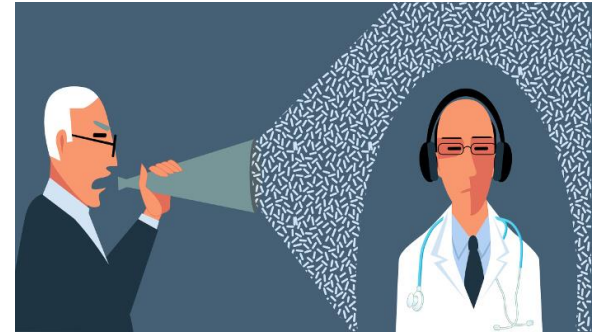
Box 1

Definition of sentinel injuries

- Minor injuries, such as a bruise or intraoral injury (excluding skin abrasions)
- Precruising infant
- Visible or detectable to a caregiver
- Poorly explained and unexpected

Sentinel Injury

Are sentinel injuries missed?



Box 2

Summary of key findings

- A sentinel injury preceded severe abuse in 27.5% of cases
- A history of a sentinel injury is rare in infants evaluated for maltreatment and found to not be abused
- All sentinel injuries were observed by a parent
- Forty-two percent of the sentinel injuries were known to a medical provider but the infants were not protected from further harm
- Recognition of and appropriate response to sentinel injuries could prevent many cases of child physical abuse

Adapted from Sheets LK, Leach ME, Koszewski IJ, et al. Sentinel injuries in infants evaluated for child physical abuse. Pediatrics 2013;131:701–7.

The significance of sentinel injuries may be missed

- Most often, they don't impact function
- Most often, they don't require treatment

Recognition of Sentinel Injuries is Important

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The injury may be small but it is important



Medical Literature

Suggests that in 27.5% of cases of definite physical abuse, there may be escalating and repeated violence toward the infant



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Sentinel Injuries





CPS Expectations

Medical Consultation for NC Child Protective Services

Child Medical Evaluation

A Child Medical Evaluation (CME) is a medical evaluation where service is provided by a qualified physician, nurse practitioner (NP) or physician assistant (PA) rostered with the North Carolina Child Medical Evaluation Program (CMEP). A CME is provided at the request of child welfare services when they are completing an active assessment due to concerns for child maltreatment.

CME Policy Review: "Must Refer"

No Override

- Under the age of 1 or are pre-cruising with a Sentinel Injury

***No override even if a child was already seen by a medical provider*



Safety planning for sentinel injury cases is just as important as for children with obvious physical harm

Importance of Identification

Identification of a sentinel injury provides an opportunity for prevention and intervention



Sentinel Injuries & CPS Assessment

The child welfare assessment of safety is critical

On average, there was 1 ½ months between the first injury diagnosis and a new maltreatment diagnosis

(Shanahan, 2021)

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Importance of Recognition



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When it's "just a bruise"

A safety intervention is still expected



Medical Evaluation

Initial medical evaluation for sentinel injuries

Skeletal survey is an appropriate part of the evaluation of an infant with a sentinel injury

Neuroimaging should be considered in the evaluation of an infant with a sentinel injury even in the absence of neurologic symptoms or other injuries

Initial Medical Evaluation

Items that will likely occur

Head
Imaging

Eye exam

Skeletal
survey

Blood
and urine
tests

Medically, what happens next?

Example

Infant with sentinel injury, facial bruising

Skeletal Survey is obtained

- Survey (x-rays) identify rib fractures

No history of trauma to explain findings

- Concerns for physical abuse remain high

CPS report is made due to unexplained bruising AND unexplained rib fractures

What happens after the CPS report and the initial medical evaluation?

- Additional medical consultation may need to occur in 2 – 3 weeks
 - Follow-Up skeletal survey
 - Integrate CPS assessment into medical consultation



Initial Medical Evaluation

Items that will likely occur

Head Imaging

Eye exam

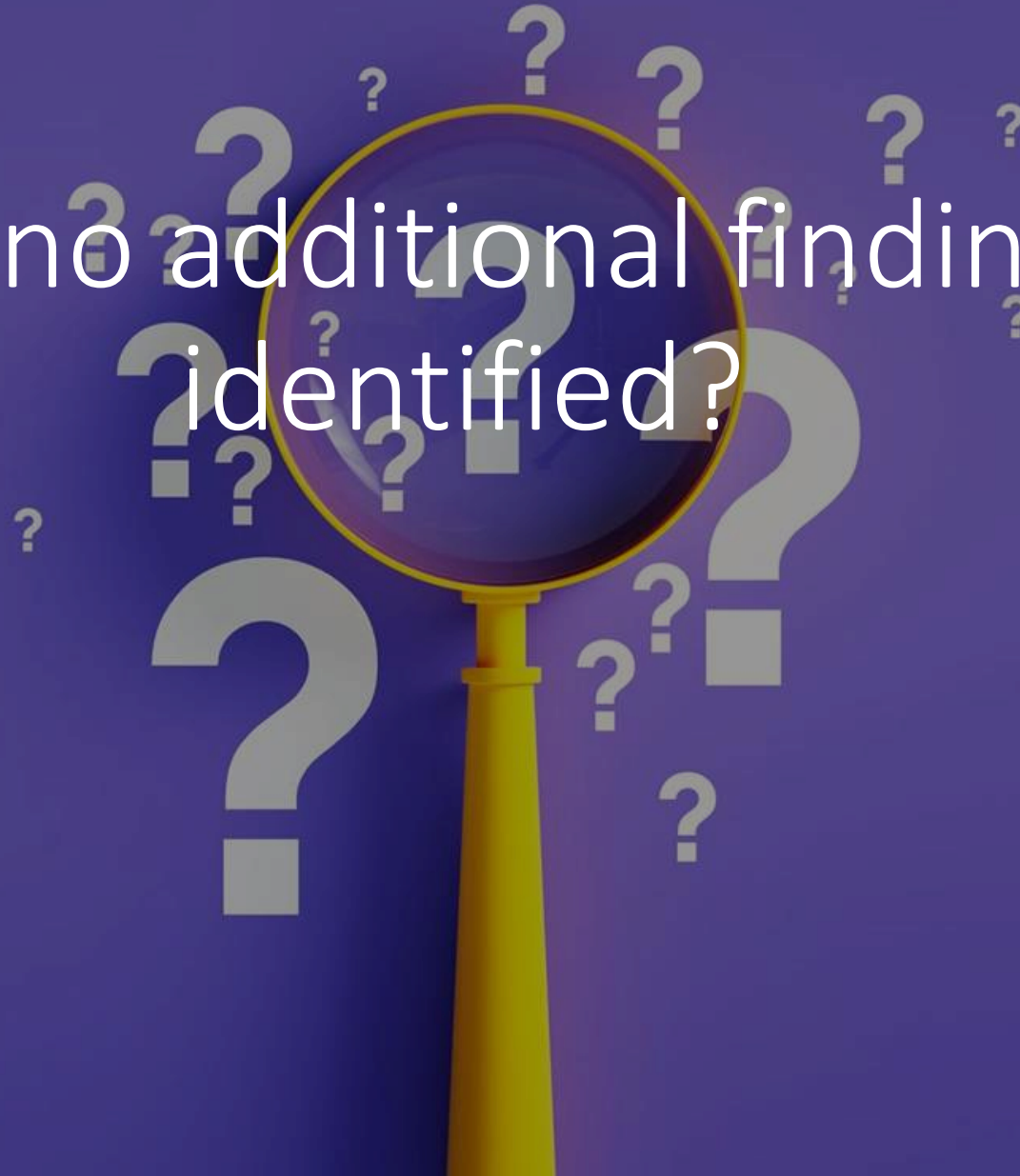
Skeletal survey

Blood and urine
tests



The absence of additional findings does NOT take away the concern for physical abuse. Sentinel injuries alone require safety.

What if no additional findings are identified?



Medically, what happens next?

Initial Medical Evaluation

Infant with small bruise on face and no additional injuries

The absence of additional findings does NOT take away the concern for physical abuse. Sentinel injuries alone require safety.

Young children with concerns for physical abuse will often receive a follow-up skeletal survey

Remaining in the home with no changes could result in more significant harm occurring to infant

Safety restrictions are expected



Importance of a CME after an initial medical visit

CME Findings: Impact and Risk

- Impact of Harm and Risk of Future Harm

The facial bruising and rib fractures are healing well. If returned to the same environment from where she lived prior to the CPS report, she is at very high risk of future catastrophic injury and/or death.

- Psychosocial risk factors which increase risk of harm

No identifiable concerns for domestic violence exposure, untreated mental health problems or parental substance abuse.

- Medical characteristics that increase risk of harm

She is at a young age and requires constant care from her caregiver.

A stethoscope with a silver chest piece and black tubing is positioned diagonally across the upper left portion of the image. It rests on a stack of medical files and a blue folder. The files have various colored spines, including blue, yellow, and red. The background is a dark, textured surface, possibly a desk or table. The overall lighting is soft, creating a professional and clinical atmosphere.

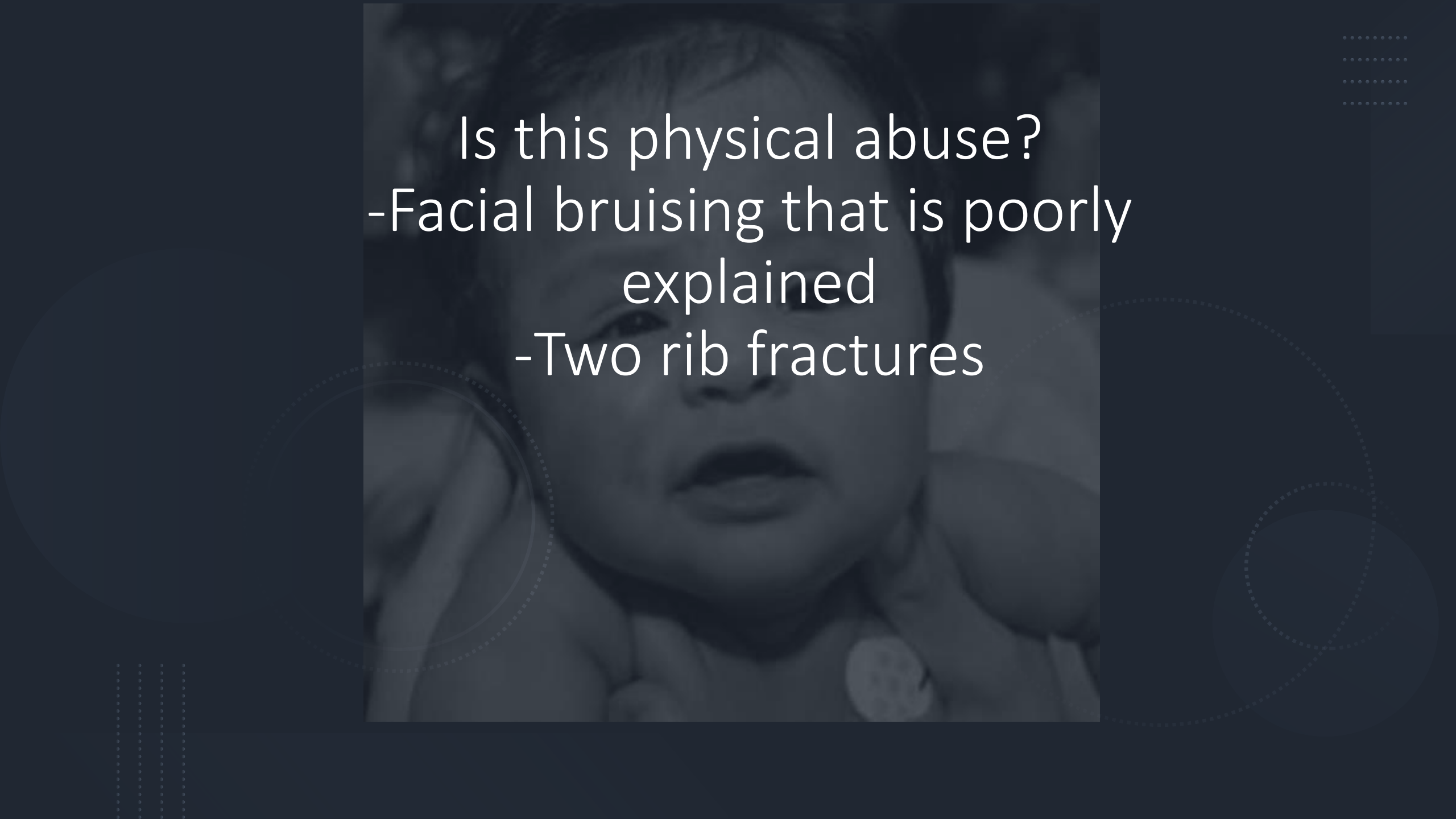
Case Examples

Case Review:
2-month-old
brought to hospital for
breathing concerns

Chest x-ray with 2 rib
fractures

Infant also noted to have an
unexplained bruise on their
face

Provider reports this is a
"good family" but we call in
every unexplained injury to
CPS



Is this physical abuse?

- Facial bruising that is poorly explained
- Two rib fractures

Is this child physical abused?
It's "just a bruise"

Are sentinel injuries physical abuse?

Causes serious physical injury to the child that does not happen by accident, or allows another to do so.

Creates a substantial risk of serious physical injury to the child, other than by accident, or allows another to do so.



Initiation and Pre-planning

Critical Elements when Starting a Case

Identify	Identify the current medical findings
Know	Know what tests are done and what else will be done
Clarify	Clarify specific dates and times
Recognize	Recognize what is an injury
Interview	Interview caregivers separate and apart
Understand	Understand any medical needs of household contacts

CPS Timeline Guides Safety Planning



Gather specific dates from all providers



Know medical findings have ranges and do not have specific dates (e.g., bruises, fractures, head bleeds)

Child Welfare History is Critical

Do not rely on the medical team to have all
the information

Child Welfare is responsible
for clarifying dates and
times for safety planning

Case: review of critical elements at initiation

- Accepted for physical abuse, immediate response

Interview Caregivers Separate and Apart



Do not introduce the history of
events



Listen carefully and clarify the
history provided

What do you need to safety plan?

When did the injury occur?

Who can protect the child?



A black and white photograph showing three hands of different sizes stacked together. The largest hand is at the bottom, a medium-sized hand is in the middle, and a smaller hand is on top. The hands are positioned palm-up, with fingers slightly spread. The background is dark and out of focus. Overlaid on the hands is the text "Is this a good family?" in a white, sans-serif font.

Is this a good family?

Summary

Sentinel Injuries may be missed by medical providers

Sentinel injuries are precursors to more serious abuse

CPS intervention with sentinel injuries is necessary