



# Child Abuse and Neglect Issues

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# How Big Is The Problem?



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7.5 Million children in the US are reported  
Child Protective Services each year as potential  
victims of abuse/neglect, 3.5 million receive  
investigations – *47/1000 Children*

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674,000 are confirmed by CPS to be victims –  
*9/1000 Children*

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In national surveys parents report abuse  
(shaking a child <2yo, beating, burning, kicking  
or hitting a child with an object/on a place  
other than their buttocks) with higher  
frequency - *49/1000 Children (3.6 Million)*

# The Scope in San Diego

- 43,779 abuse/neglect reports were made to the Hotline in 2018-2019
  - This included 79,598 children = 10% of the population
- 23,101 of these reports were assigned for investigation
  - This included 44,898 children = 6% of the population
- 4,383 individual victims





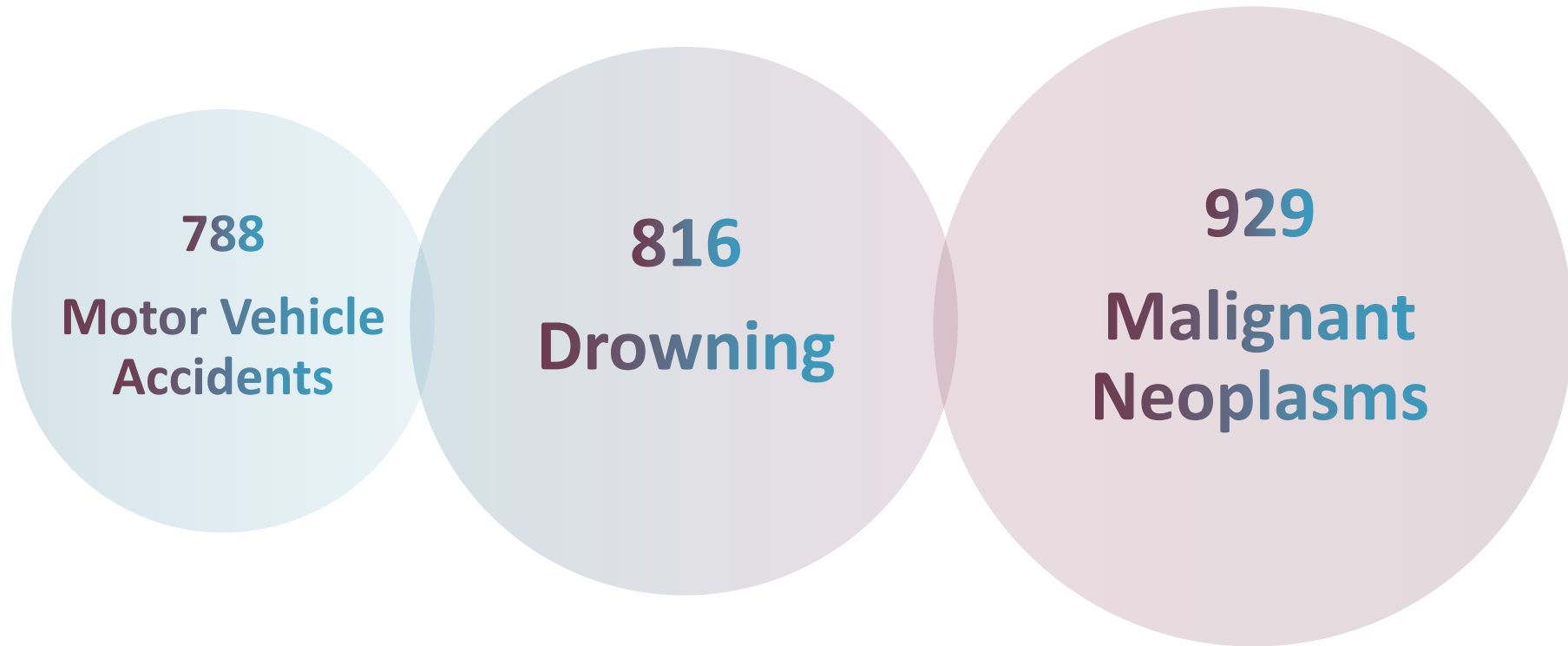
It's All About Perspective



**5 Children Die Every Day Secondary to  
Abuse/Neglect**

**1994/year**





# Risk Factors For Perpetration of Abuse



# Other Risk Factors

- Single parent household
  - Family stress &/or isolation
  - Low birth weight or disability of child (2x the risk)
  - Young age of child(ren)
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- **Children living in homes with an unrelated adult are 50x more likely to die of abuse/neglect than children living with two biologic parents**



A child's drawing on a piece of paper, featuring a house with a red roof and chimney, a sun, clouds, and four children holding hands. The drawing is done in a simple, colorful style. The text "But...." is written in a large, dark blue font over the drawing.

**But....**

**There is no singular type of family  
or social situation that is immune  
from abuse/neglect issues**





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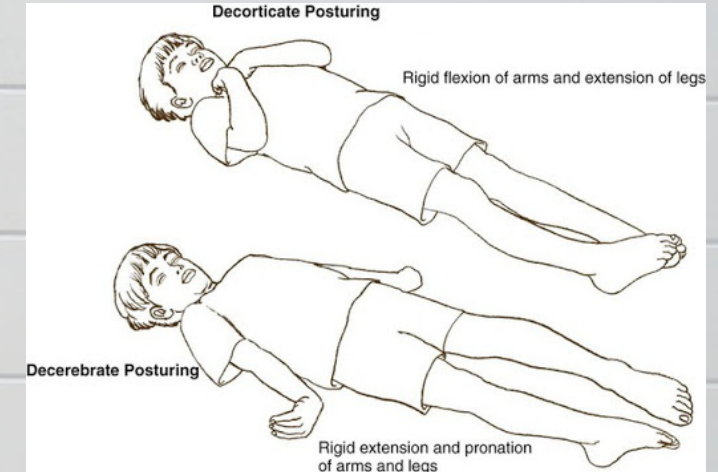
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A

S

- Infant female presented to PCP via private vehicle. Found to have blood from the mouth “of unclear origin”, numerous forehead bruises, decerebrate posturing, and inadequate respirations. No intervention at PCP

- EMS arrived to find patient with GCS 4, gray skin, bradycardia to 56, decerebrate posturing, L pupil fixed and dilated, R pupil pinpoint and unresponsive, multiple bruise on forehead and neck, hematomas on occiput, and blood from the mouth. Temp was 95°F

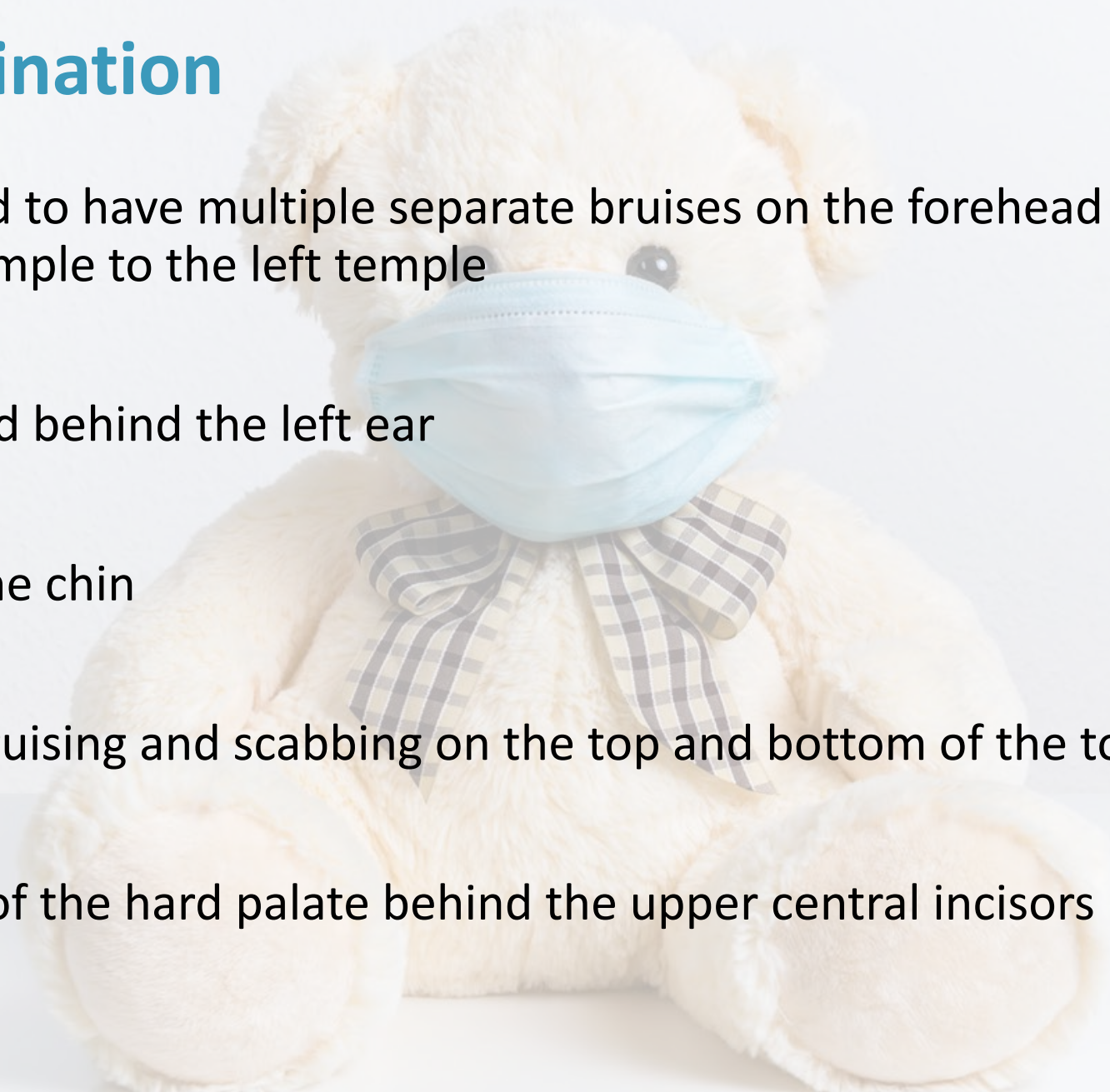


# Important Information to Obtain

- **Timing** – physicians and lay people are bad at this
- **What was seen** – this is important because you see them prior to intervention
- **Vitals** – to include Temperature (this is imperative to aid with timing of injury)
- **What was said** – this helps with identification of changes
- **What was done** – what injuries might be related to intervention

## On Examination

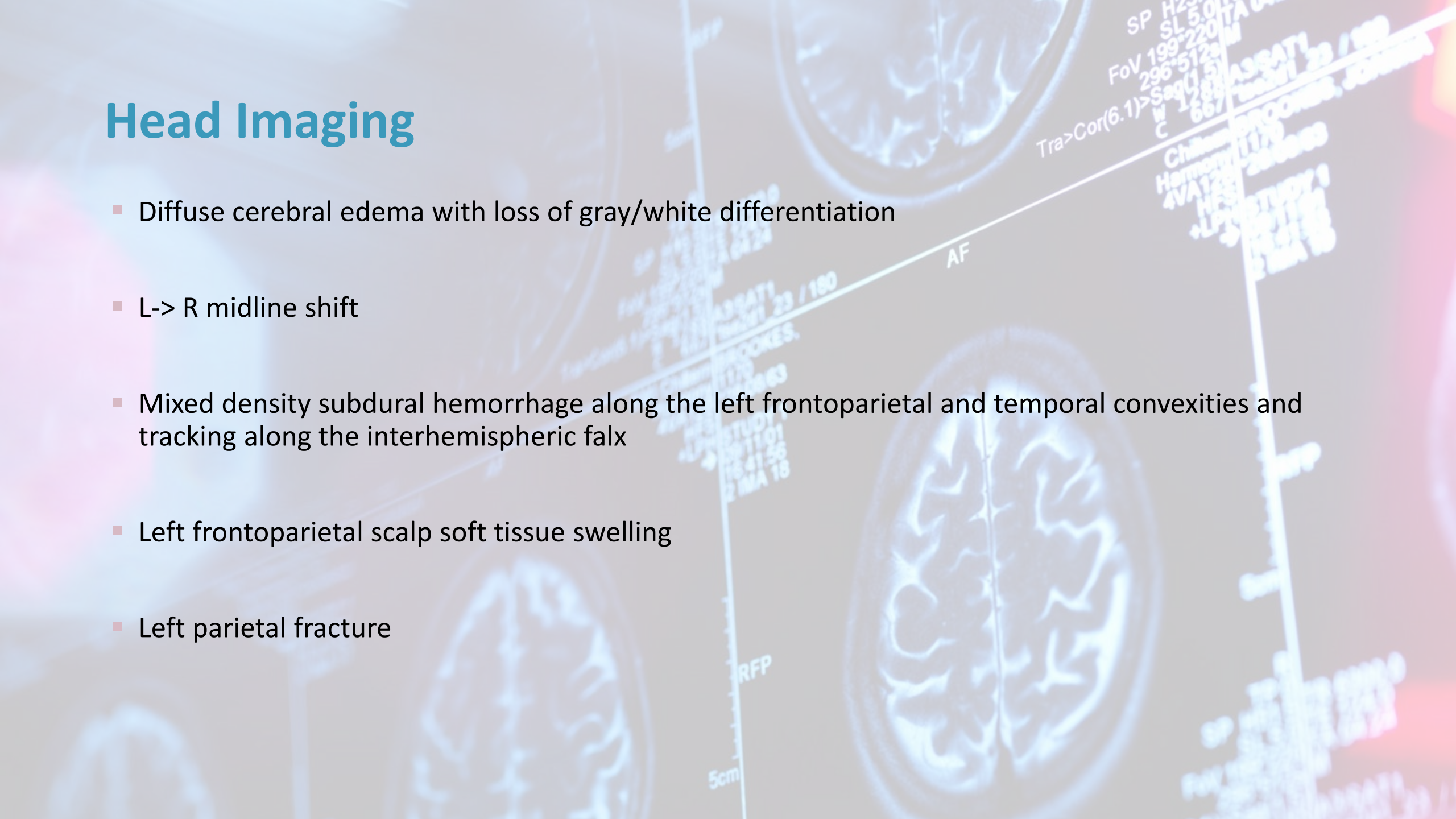
- Infant noted to have multiple separate bruises on the forehead extending from the right temple to the left temple
- Bruise noted behind the left ear
- Bruise on the chin
- Petechial bruising and scabbing on the top and bottom of the tongue
- Laceration of the hard palate behind the upper central incisors





# Head Imaging

- Diffuse cerebral edema with loss of gray/white differentiation
- L-> R midline shift
- Mixed density subdural hemorrhage along the left frontoparietal and temporal convexities and tracking along the interhemispheric falx
- Left frontoparietal scalp soft tissue swelling
- Left parietal fracture





# Chest CT & Skeletal Survey

- Healing transverse fracture of the right radius
- Healing fractures of the right anterior 7<sup>th</sup> rib and posterior left 5<sup>th</sup> rib
- Subpleural ground glass opacities underlying the right anterior 7<sup>th</sup> rib consistent with a healing pulmonary contusion
- Loss of height at the superior endplate of T2 suspicious for a compression fracture
- Posterior medial CML of the left distal femur



## History Obtained From Family

- Baby was completely well in the morning. Heard on the monitor to be crying. Father went to check on her at which point she became unresponsive. Brought to mother who could not arouse her. Family friend called who subsequently arrived to the home and transported all 3 to the PCP
- Bruising reported to be the result of the baby injuring herself during “tummy time”
- No history for the intraoral injury or fractures



# Opthalmology

- Bilateral retinal hemorrhages that are multilayered (R>L) and too numerous to count
- Subhyaloid hemorrhage on the right
- The pattern of hemorrhage is inconsistent with minor trauma and highly suggestive of inflicted head trauma

# Review of Medical Records

**Presented to the PCP at 6 weeks of age with bilateral subconjunctival hemorrhages**

- No history provided
- Referred to Ophtho

**Follow-up at PCP at 7 weeks. Subconjunctival hemorrhages remained**

- Still no history
- Had not been to Ophtho
- No further work-up



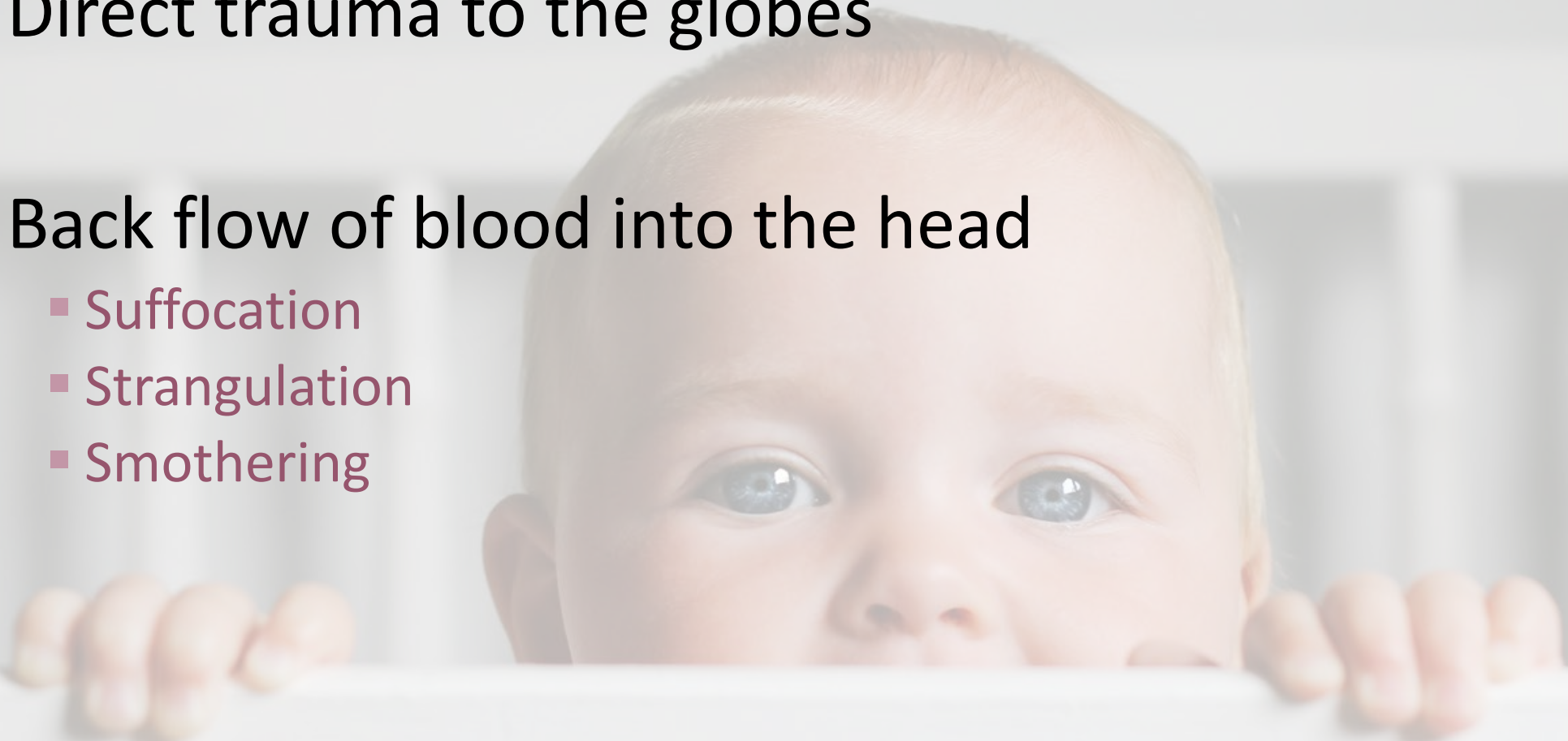


**This is a Sentinel  
Injury**



# Causes of Subconjunctival Hemorrhage in Infants

- Direct trauma to the globes
- Back flow of blood into the head
  - Suffocation
  - Strangulation
  - Smothering



# Things That Do Not Cause Subconjunctival Hemorrhage



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Constipation

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Vomiting

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Coughing (unless they have pertussis)

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Self-injury

# Social History



- Parents previously homeless
- Both with history of drug abuse issues
- Both with history of law enforcement involvement
- Mother is Hispanic
- Impoverished family



## Outcome

**Infant did not survive her injuries**





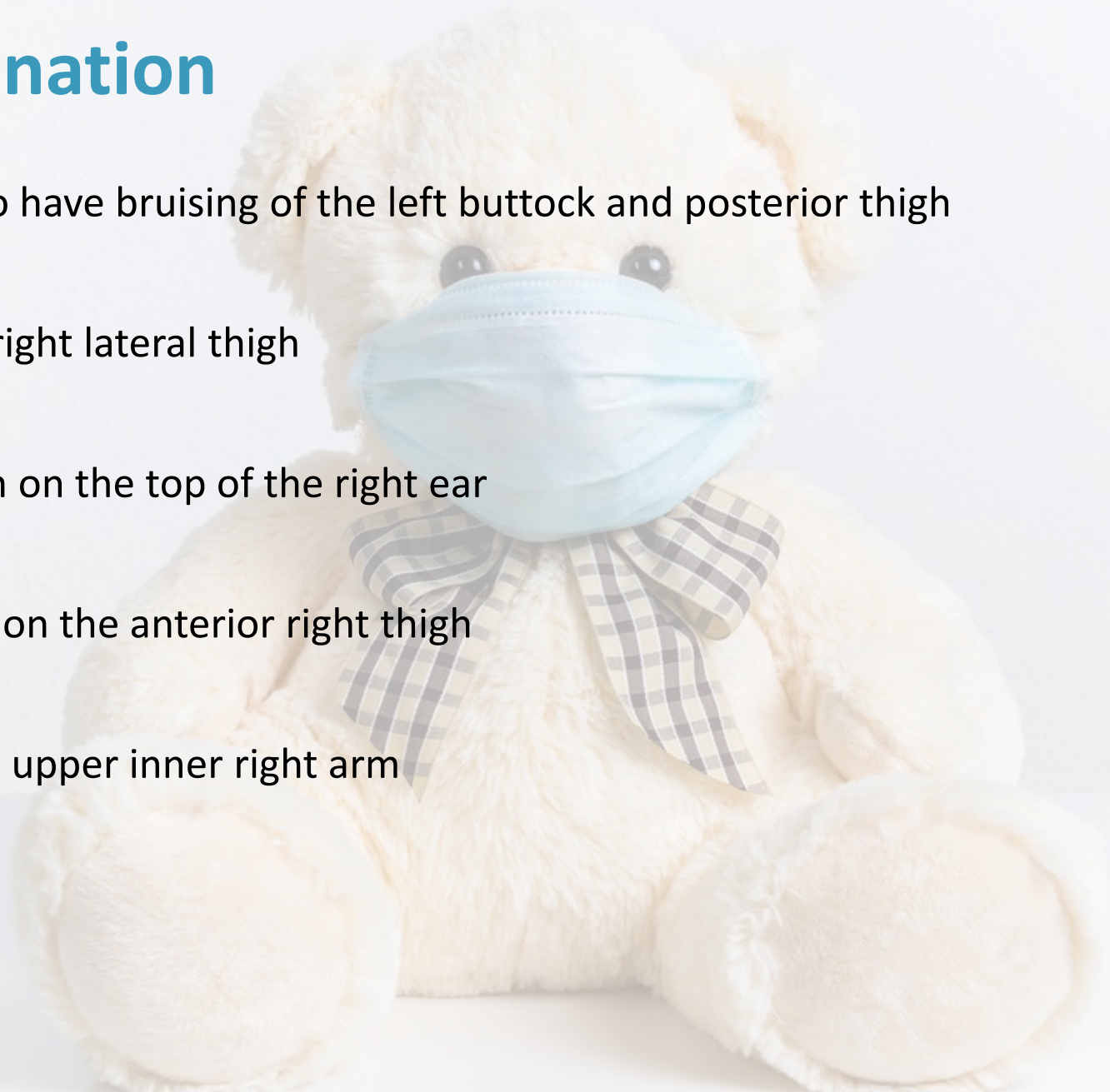


- 5 month old male brought in by EMS from home. Father reported child became unresponsive while being fed a bottle
- EMS arrived to find baby actively seizing. A dose of versed was given with no result. Baby was then transported to an outside ED where seizure activity continued for >12 minutes.
- In the ED baby was provided with Ativan x 2 and intubated for respiratory distress. Transported for a higher level of care
- Transport team noted infant to have zero spontaneous movements and no response to pain. Fontanelle was documented as bulging and tense. Core temp 93° F
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# On Examination

- Infant noted to have bruising of the left buttock and posterior thigh
- Bruise on the right lateral thigh
- Scabbed lesion on the top of the right ear
- L-shaped scab on the anterior right thigh
- Bruising of the upper inner right arm

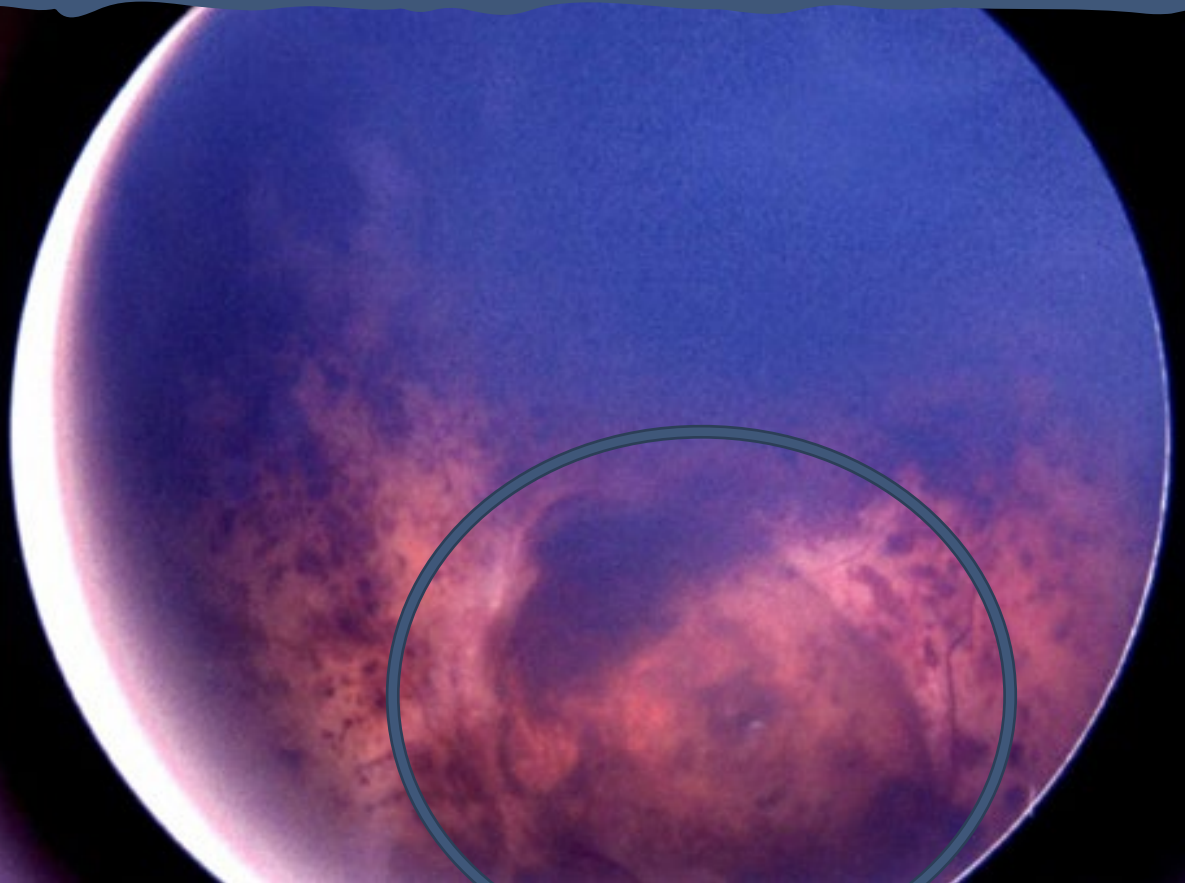


# Head Imaging

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# Ophthalmology





# History Obtained From Family

- Baby was completely well all day. Mother left child in the care of father while she went to a 24 hour shift at work.
- Overnight while providing the baby with a bottle baby father noted that he suddenly went limp and became unresponsive
- No trauma history provided

# Additional History

- Both parents reported that this child previously had an episode of bleeding from the mouth
- They had no explanation for this finding
- This occurred while in the care of the father

# Review of Medical Records

- Patient had presented 1 month earlier (age 4 months) to the PCP for a WCC
- Seen to have a bruise on the cheek – merely mentioned. No evidence that an explanation was sought, or that inflicted injury was considered



**This is a Sentinel  
Injury**

# Social History



- Parents have no history with LE
- No history of drug abuse issues
- Both parents are physicians
- Both White
- Upper class family

A large field of white umbrellas, viewed from a high angle, creating a repeating pattern of curved shapes. In the center of the field, one umbrella is a vibrant blue, standing out from the rest. A semi-transparent white rectangular box is overlaid on the lower half of the image, containing the text.

**So What Is The  
Difference?**



# Think About It

- Identical injuries
  - Identical histories
  - Identical outcome for the child
- Polar opposite response by the system

**BIAS**

# Attribution Error

The natural human tendency to over attribute personality traits as a driver of behavior and to under attribute the role of environmental factors



# TRUTH?

- Seemingly “nice” people can behave in uncharacteristic ways under the correct circumstances
- Seemingly “bad” people may not be responsible for their child’s injuries

# What We Think







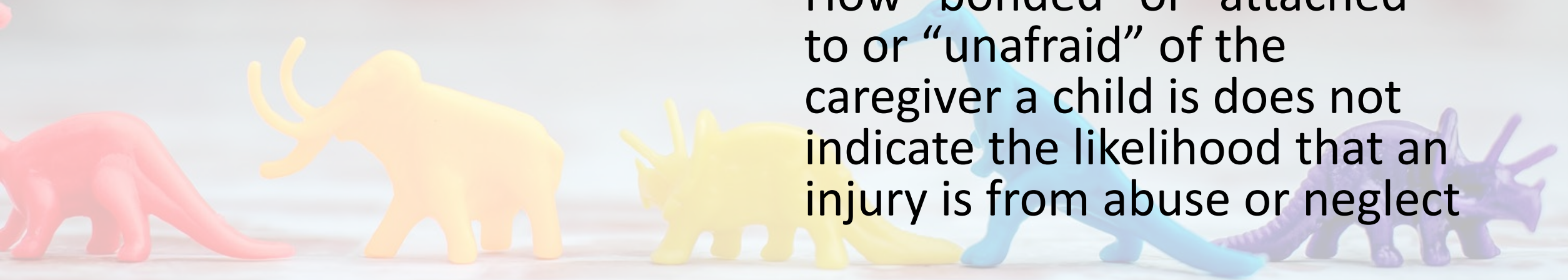
# Reality





# Remember

- How “nice” or “cooperative” or “appropriate” a caregiver is does not determine the likelihood that a child is being abused or neglected
- How “bonded” or “attached” to or “unafraid” of the caregiver a child is does not indicate the likelihood that an injury is from abuse or neglect



A photograph of seven red flags flying on tall silver poles against a blue sky with white clouds. The flags are arranged in a diagonal line from the bottom left to the top right. The text "Red Flag Histories" is overlaid in the center in a large, white, sans-serif font.

# Red Flag Histories

# Watch Out For..

- No history
- Unwitnessed events
- Poorly explained events
- Infant caused the injury to him/herself
- Constipation or crying
- Sibling caused it
- Pet caused it







# Triage Cuing

**The tendency for a diagnostic process to follow the path predetermined by triage labels**

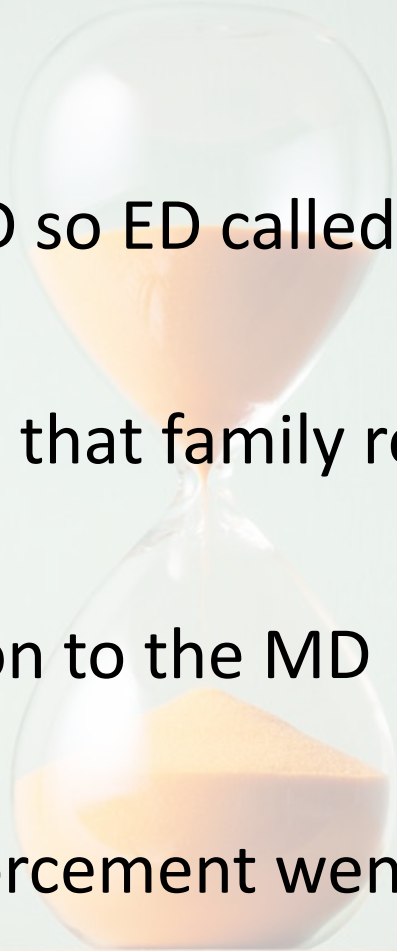
**It is very difficult for providers that come after you to think about alternate diagnoses once they have an embedded idea**



- 1.5 month old male brought to urgent care after a reported "roll" off of the bed
- On exam noted to have lip bruising/swelling and a bruise on the upper back
- Injuries concerning for non-accidental trauma so 911 called for transfer to ED to complete the work-up
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- MD relayed concerns for NAT to the ambulance crew



# Later...

- Child had not arrived to the ED so ED called urgent care
  - 911 dispatch called – reported that family refused transfer
  - No one relayed this information to the MD
  - CWS report filed and Law Enforcement went to the home to encourage the family to go to the ED
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# History Obtained by ED

- Father stated that once in the ambulance the crew stated that the baby looked “normal” and that they did not think that this was an emergency
- They expressed that the transport was going to cost the family a lot of money and offered that the family could opt out. They did so and the crew took the family back to their car



# On Examination

- Infant noted to have bruising of the top of the right hand and the inner right wrist
- Linear petechial bruises under both axillae
- Bruising of the philtrum
- Abrasions on the inner upper lips
- Bruising of the upper inner right arm





**Injuries are Inconsistent  
With a Fall and Evidence of  
Abuse**

# Of Note...

**When there is a concern for NAT we will recommend ambulance transport to the hospital**



# Bruises



# Bruises

- The most common accidental injury in childhood
- Also the most common abusive injury
- The most common sign of abuse to be missed





# Why Bruises Are Important

- They are a high risk prognostic indicator
  - 80% of fatal child abuse cases were known to a medical provider that did not act on injuries seen
- Failure to recognize bruising as a sign of abuse is a medical, social, and legal shortcoming that leads to poor outcomes



A young child with curly hair is shown from the chest up, covering their face with both hands. The child's hair is a mix of brown and blonde curls. The background is a soft, out-of-focus light color. The overall mood is one of vulnerability or distress.

# Why Bruises Are Overlooked

- In ambulatory children bruises are common and often innocuous injuries
- Two things that can change this:
  - Age
  - Location

# Bruising and Age

“If you’re not old  
enough to cruise you’re  
not old enough to  
bruise”





# Bruising Myth



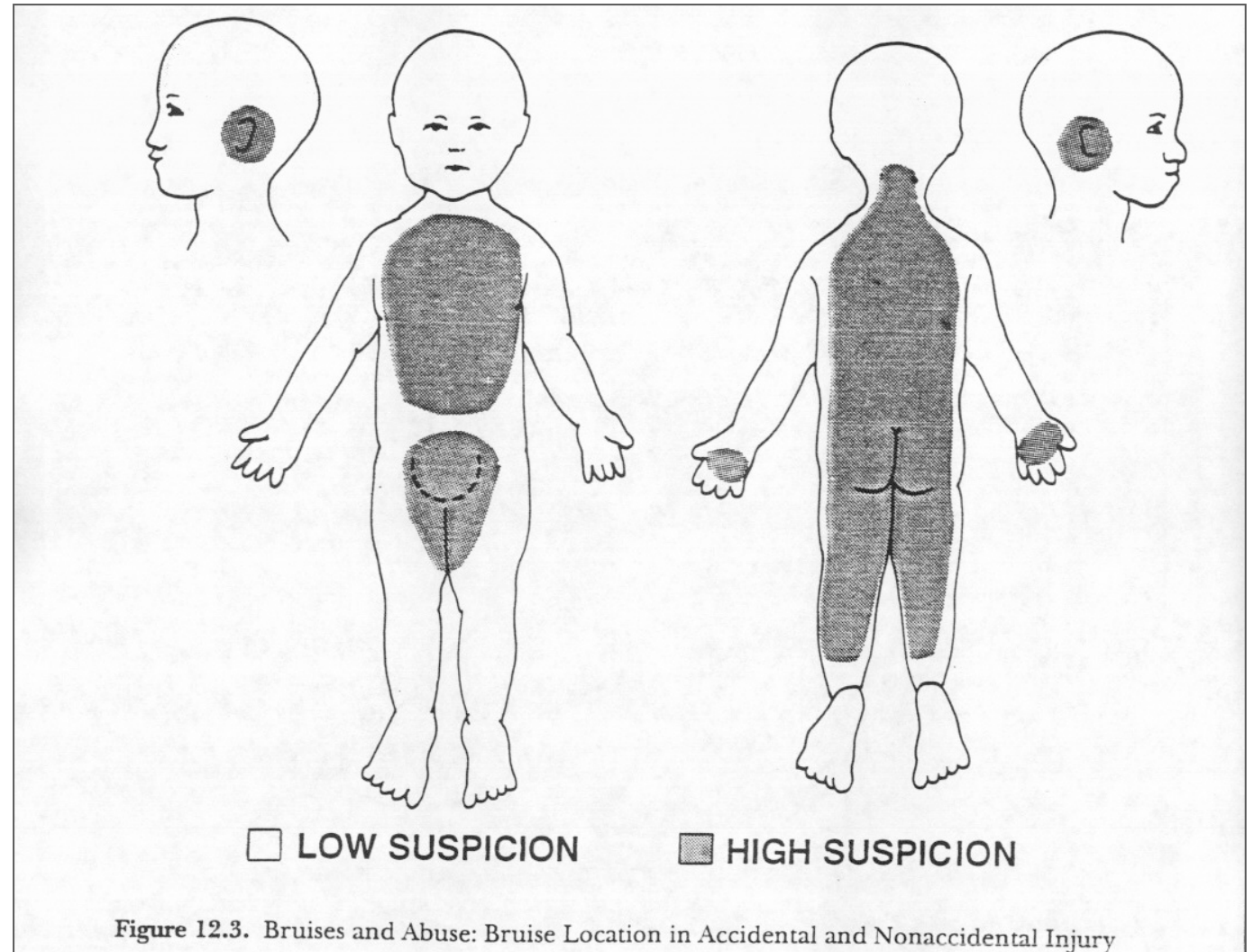
- **Infants bruise easily**
  - Bruising is a function of force applied to the vessel wall such that it is crushed to the point of failure
  - Infants cannot generate enough force themselves to cause vessel injury
  - Resistance to bruising is a function of elasticity of tissues and presence of subcutaneous fat – both higher in infants



# Truth

- Infants bruise rarely
- Unexplained bruising in a non-mobile infant predicts future injuries, some of which will be fatal

# Bruises in Ambulatory Children





**Spanking**





Circumferential fingerprint marks are visible as bruises on the left arm of an abused 6-month-old child.

# Slap Injury





# Belt Buckles







**Belt Marks**



**Loop Marks**





# Patterned Bruising



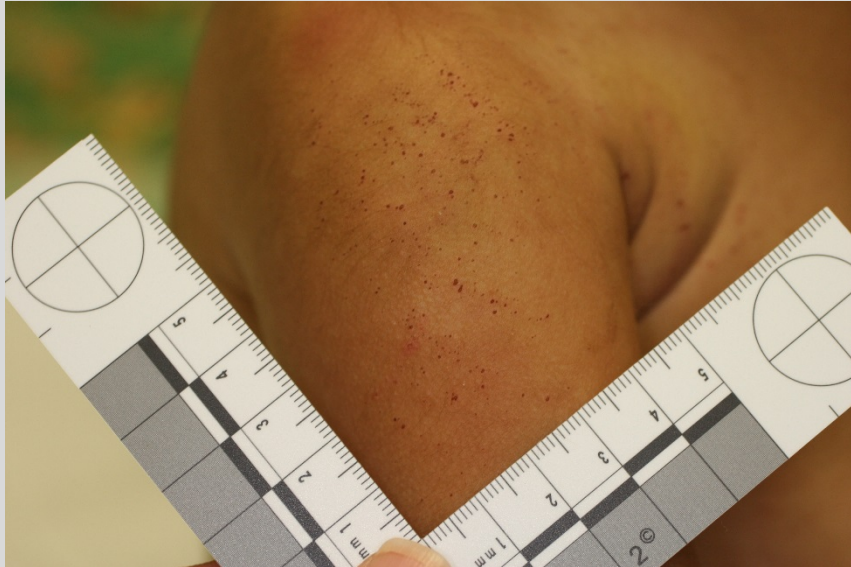
# Patterned Bruising



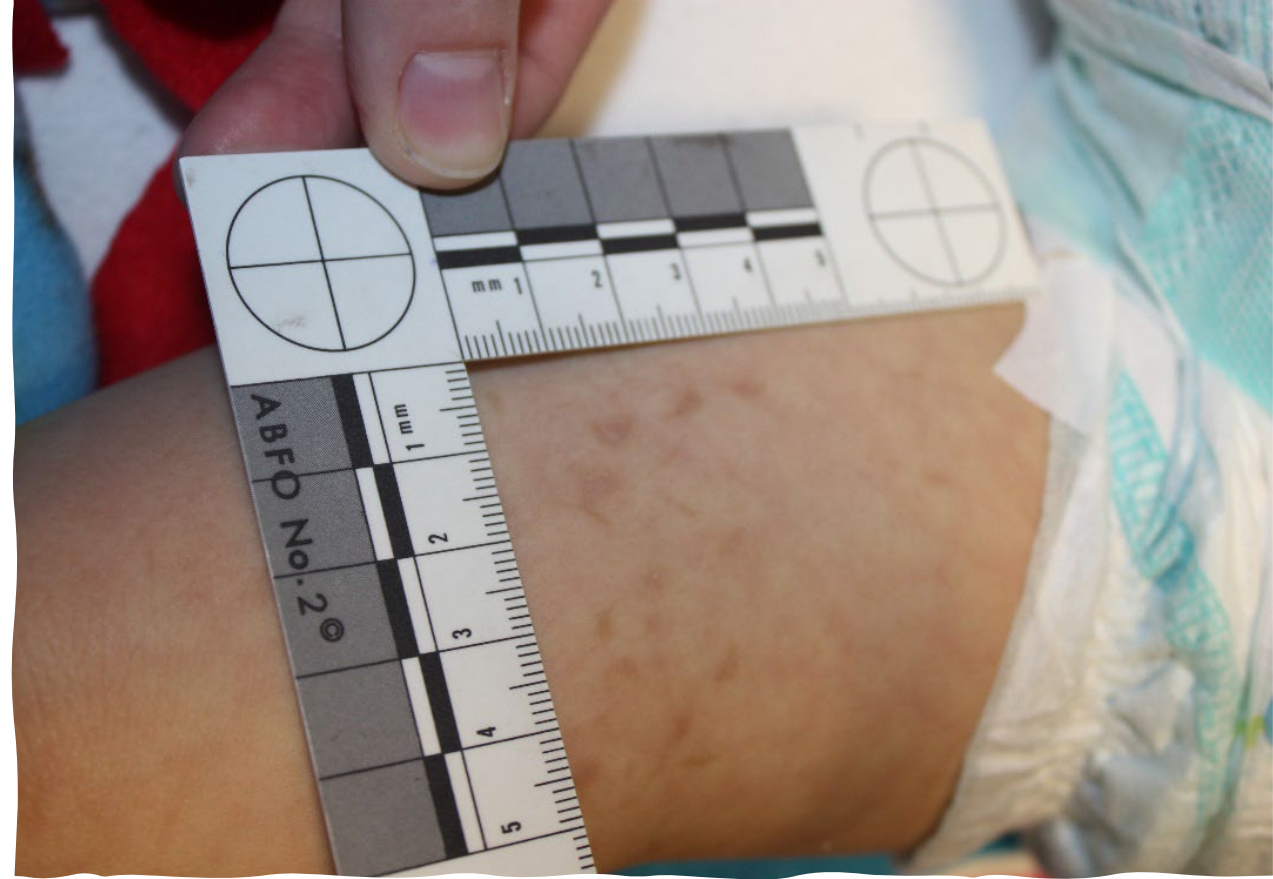


# Patterned Bruising

# Hair Brush Injuries







**Fingernail Marks**

# Ligatures



# Scratch Marks





# Strangulation Injury





# Suffocation



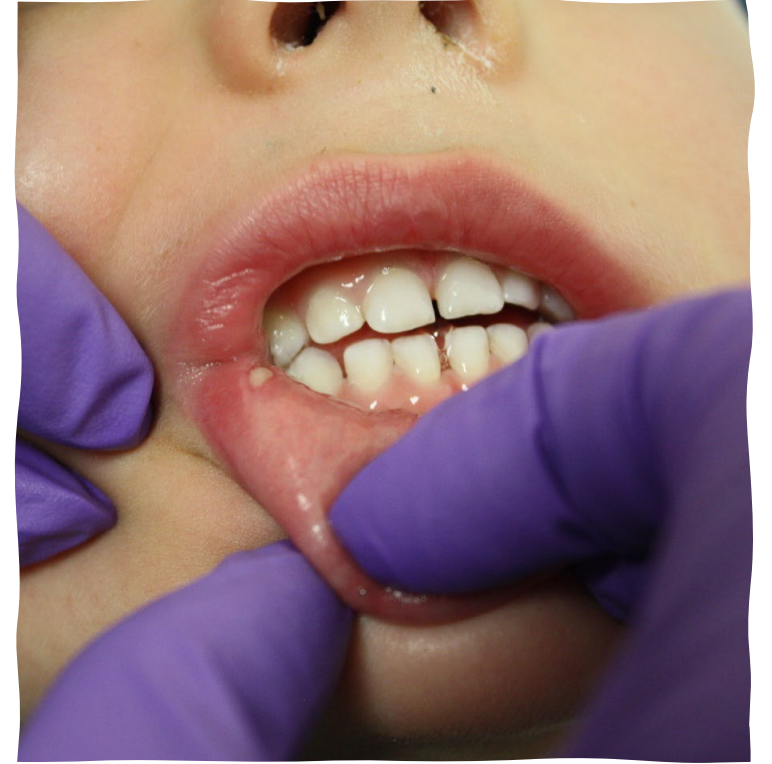
# Smothering





# Squeeze Injury





# Oral Injury

**Look For Oral Injury  
Before Medical  
Intervention**





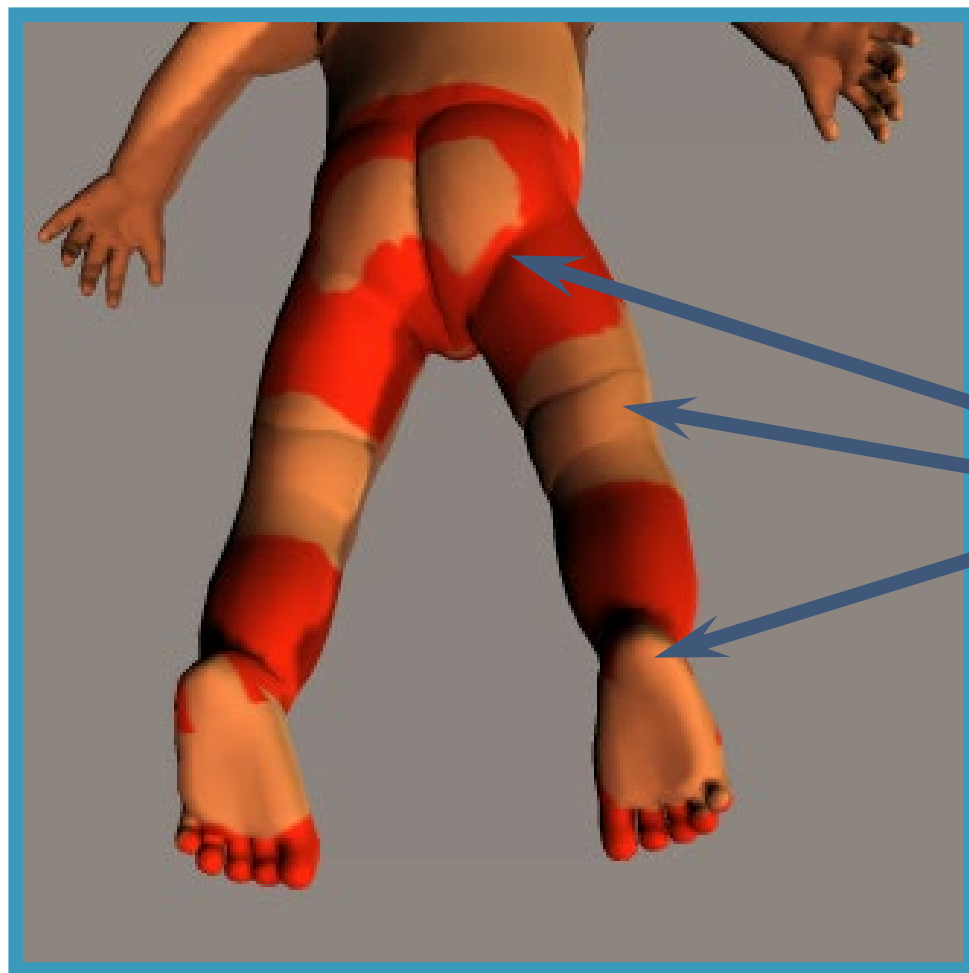
The background of the slide is a dense, overlapping pattern of numerous small, rectangular sticky notes in various pastel colors including light blue, pink, yellow, and lavender. The notes are scattered across the entire frame, creating a textured, collage-like effect.

# Not All Genital Injury Is Sexual Abuse

- Genital injury is common in toilet training accidents
- This is especially true in immersion burn injury







Protected  
areas



## Traumatic Alopecia



## Subgalial hemorrhage



# Take Home Points



Over documentation is better than under



Transport kids to the hospital when NAT is a concern...even if you don't believe it is warranted



Keep an open mind



Watch for bias