The Recognition and Reporting of Child Physical Abuse and Neglect

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US Department of Health and Family Services

- National Statistics for 2004
  - 872,000 children were victims of child maltreatment
  - 17.5% were victims of physical abuse
  - Children less than one year of age account for the largest number of victims

Child Abuse Legislation

- CAPTA Child Abuse Prevention and Treatment Act 1974
  - Federal law passed to ensure that all 50 states have child abuse reporting laws
- State by state laws vary
- 18 states require that anyone suspecting abuse and neglect be a mandated reporter
- 32 states define a list of professionals providing care for children as mandated reporters

Virginia Department of Social Services

- Virginia law established in 1975
- State Hotline 1-800-552-7096 24/7
- Local Jurisdictions 8am-4:30pm
- Mandated reporters include all health care professionals including prehospital providers
- Confidential reporting
- Failure to report

Reportable CPS examples

- Causes or threatens to cause physical or mental injury
- Child present during sale or manufacturing of illegal dugs
- Neglects or refuses to provide adequate clothing food or shelter
- Abandonment or lack of supervision
- Knowingly leaves child with sex offender
- Exposes neonates in utero to non prescription controlled substances

Non CPS issues

- Educational neglect (school system monitoring)
- Failure to provide immunizations (preventive)
- Failure to restrain children in cars (police jurisdiction)
- Non caretaker sexual abuse (for example 15 year old cousin who was not babysitting) (police)
- Incident that did not happen in Virginia and the caretaker does not live in Virginia

Virginia Department of Social Services FY2008

- 50,598 children reported for abuse and neglect
- 6,099 children involved in founded cases
- 35,879 children whose families were offered assessment plans

Virginia Department of Social Services FY2008

- 74 child fatalities were suspected abuse and neglect cases
- 36 child fatalities were founded abuse and neglect cases
- 24/36 child fatalities were under the age of four years

Virginia Department of Social Services FY2008

- Categories of maltreatment:
  - Physical Neglect 54.5%
  - Physical Abuse 26.2% (2138 victims)
  - Sexual Abuse 15.1%
  - Medical Neglect 2.3%
  - Mental Abuse 1.9%

Child Physical Neglect (54.5%)

- Abandonment
- Inadequate Supervision
  - No age for latch key children in Virginia
- Inadequate Clothing
- Inadequate Shelter
- Inadequate Food
  - Failure to Thrive

Medical Neglect

- Enforces Emergency Medical Care and Treatment
- Enforces Necessary Medical, Dental and Mental Health Care and Treatment
- Does not include preventive health care like immunizations and well baby checks

Examples of Medical Neglect

- Refusal of a blood transfusion
- Refusal of admission for severe dehydration
- Failure to seek treatment for fractures, burns, lacerations, mutilation, maiming or ingestion of a caustic substance
- Failure to provide or treat a chronic illness that leads to frequent hospitalizations or deterioration because of lack of care.

Failure to Thrive

- Sign that describes a particular problem
- Used to describe children who are not growing according to expected norms
- Absolute deficiency: < 2 standard deviations (SD) below the mean for age
- Relative deficiency: a shift in the child's growth curve of two or more percentiles e.g. 75 percentile to the 25 percentile

Indications for Hospitalization

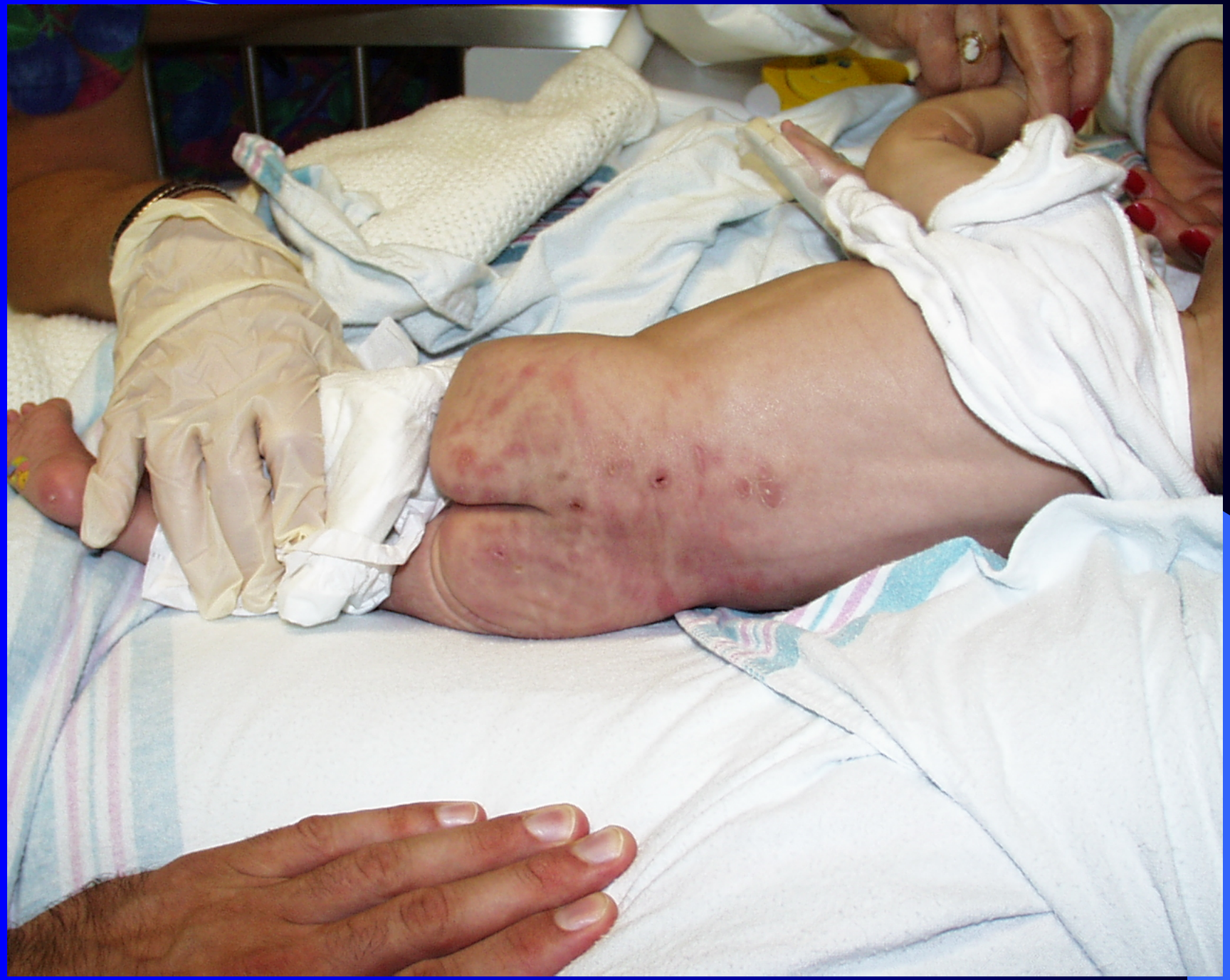
- Infants less than 6 months of age
- Below birth weight at 6 weeks of age
- Head circumference falling off the growth curve < 6 months
- Signs of abuse
- Signs of neglect
- Failure of outpatient management

Refeeding Syndrome

- Hypophosphatemia
- Hypokalemia
- Hypomagnesemia
- Vitamin deficiencies
- Volume dependent heart failure

Prognosis for Failure to Thrive

- 20-60% of FTT children remain < 20 percentile on the growth curve
- 50% of FTT children have below normal cognitive function



Mortality and Morbidity in Child Abuse:

Head Trauma

Abdominal Trauma

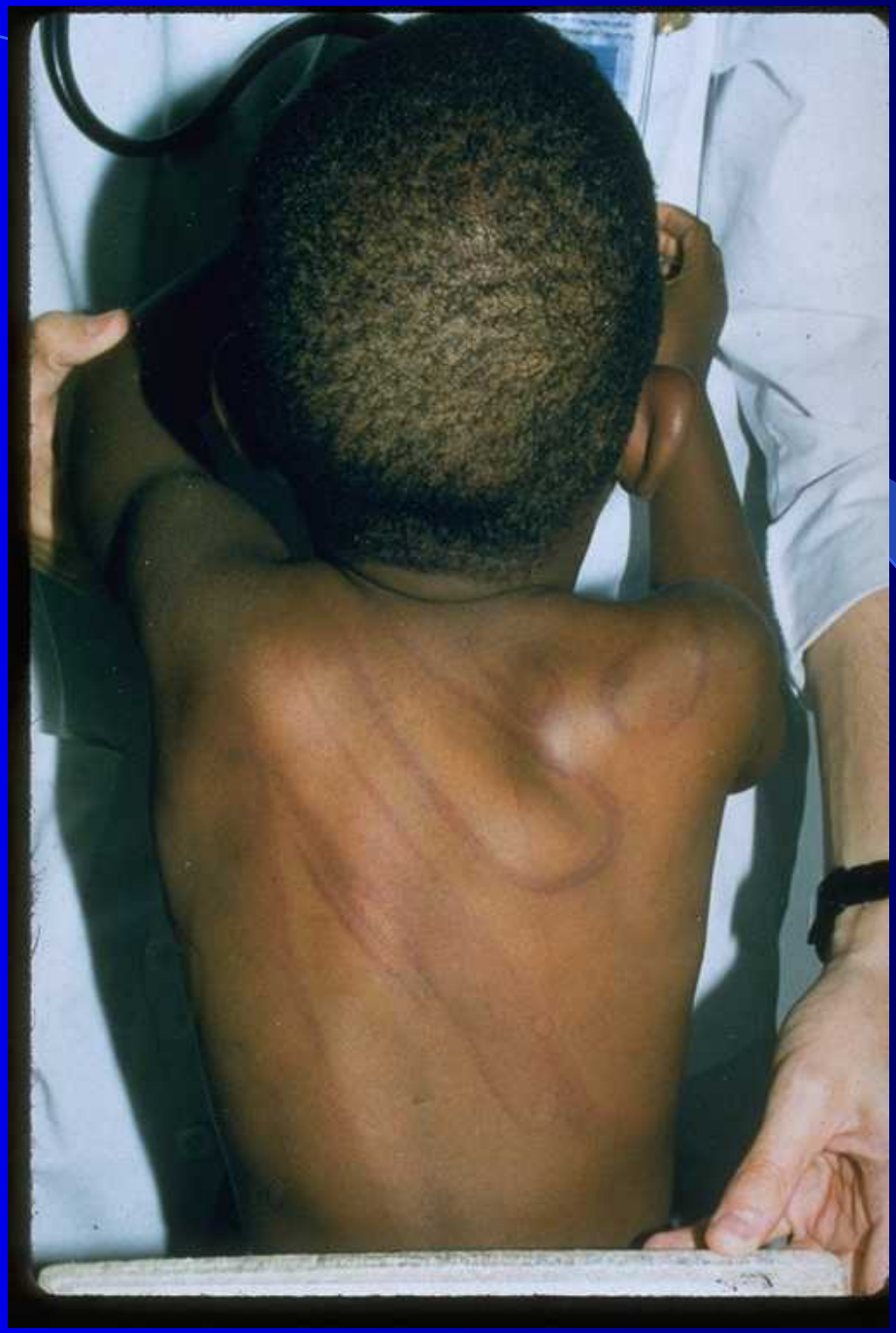
Burns

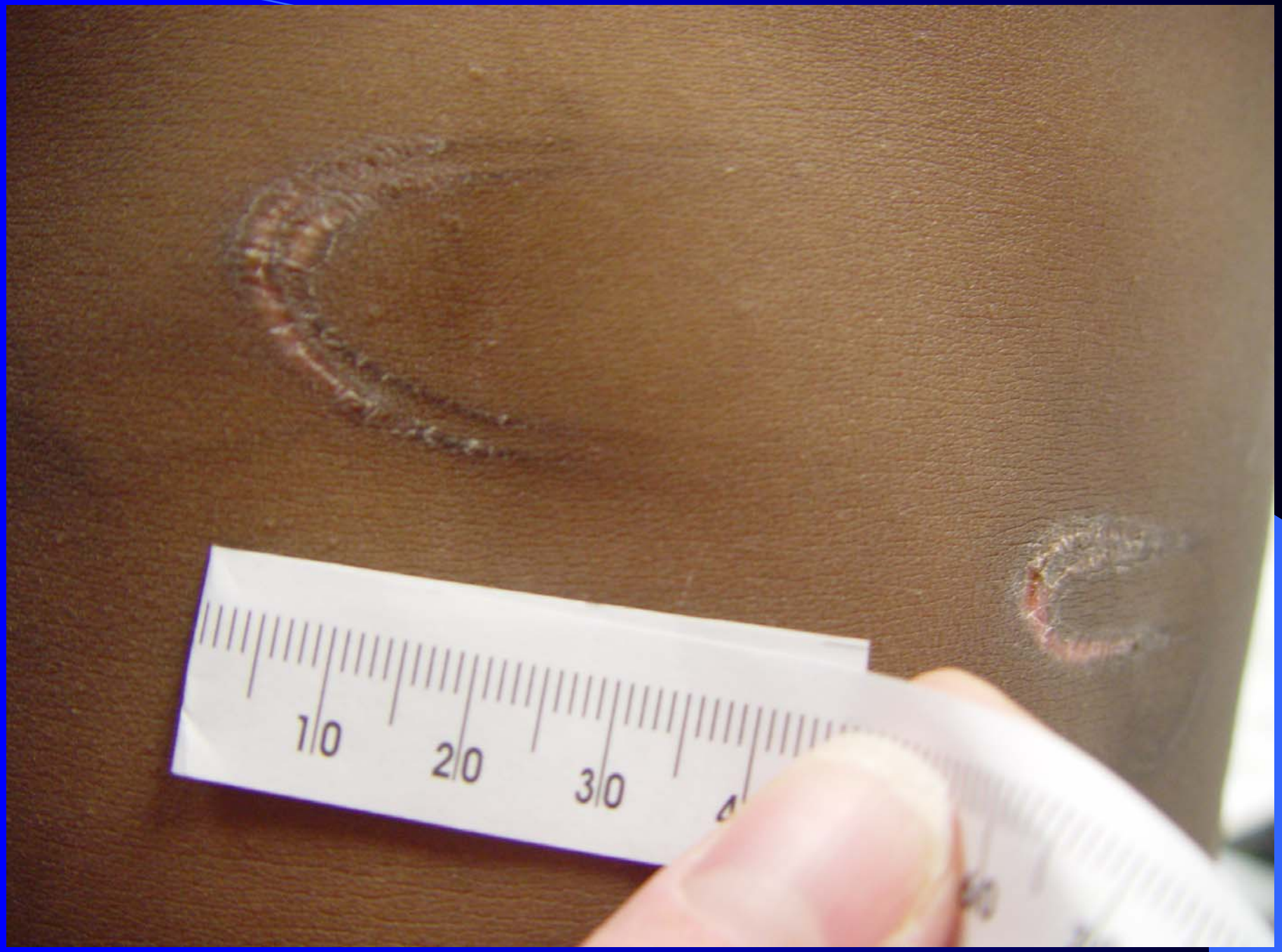
Soft tissue injuries

- The most common marker of physical abuse is a bruise:
  - Ecchymoses
  - Hematomas
  - Contusions
  - Abrasions lacerations
  - Burns
  - Human bites

Characteristics of Soft Tissue Injury

- Location
- Age of Injury
- Morphology

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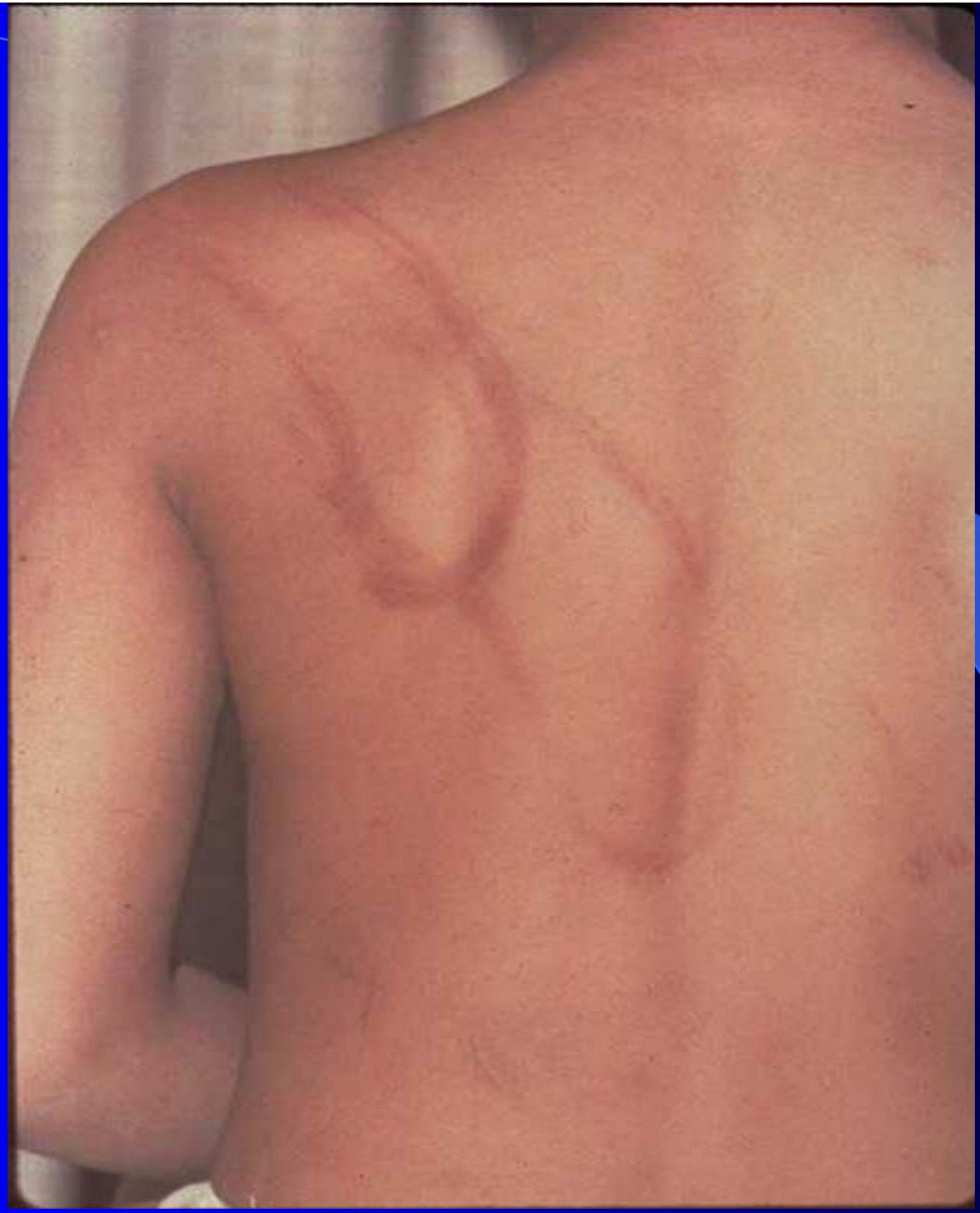

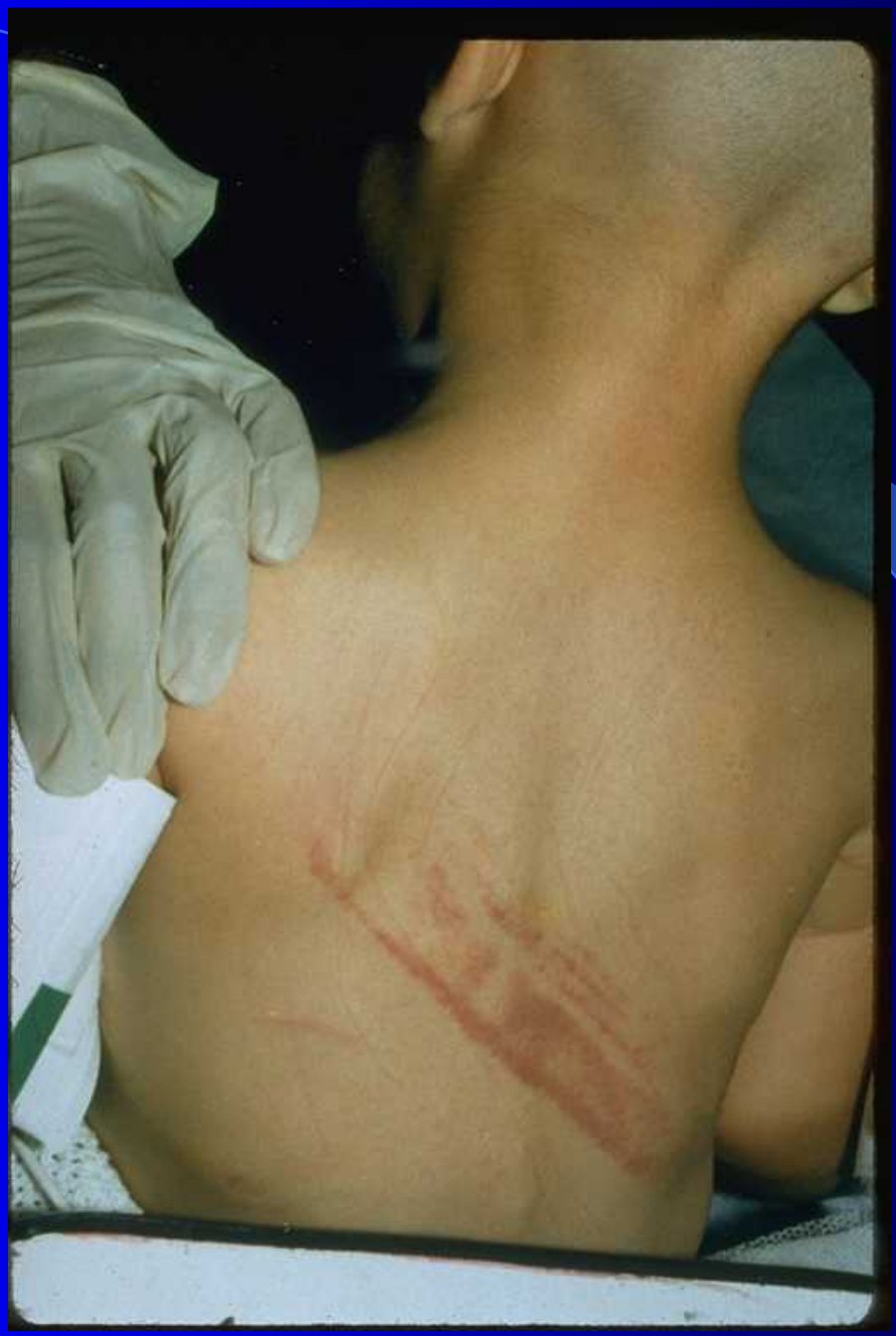

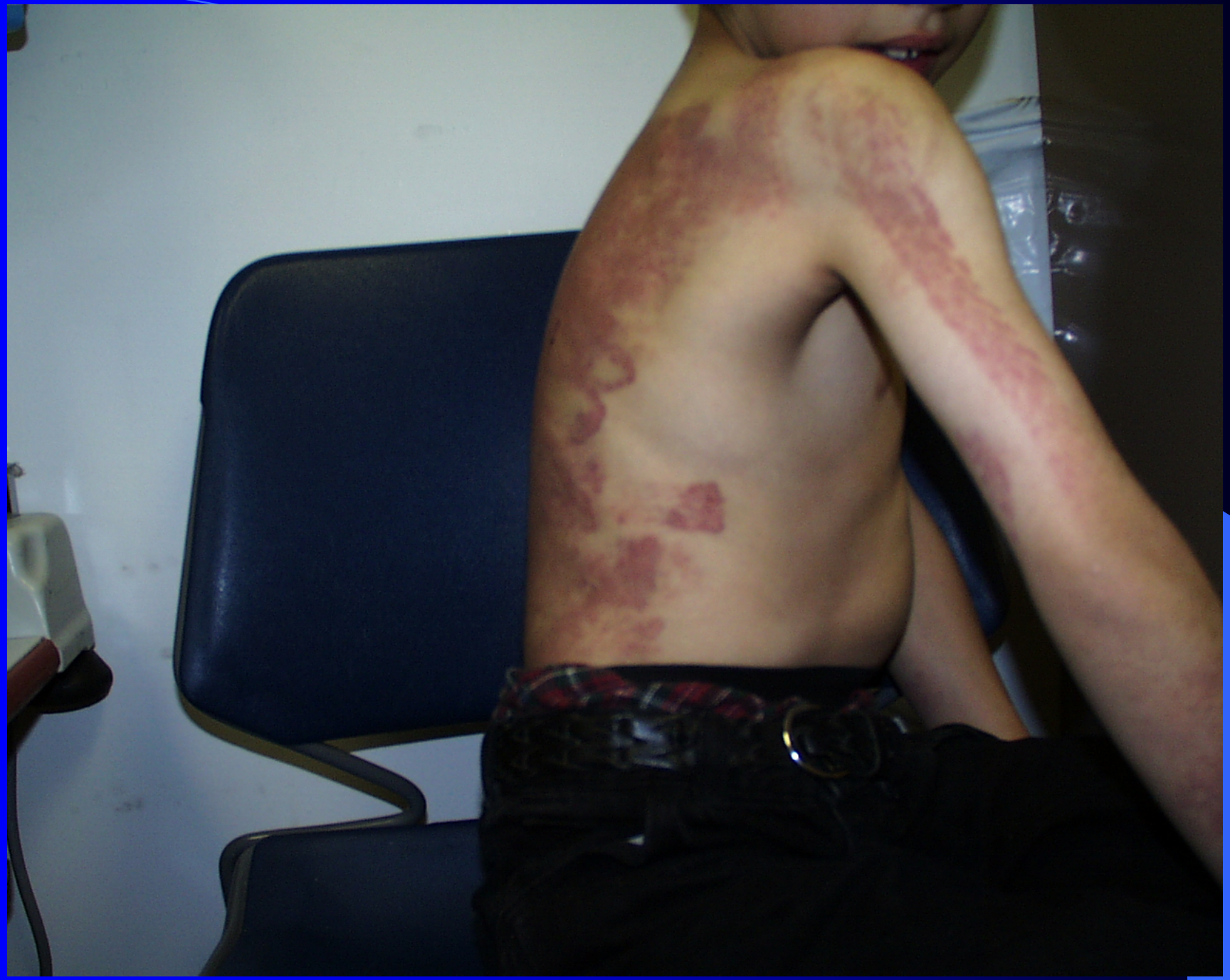

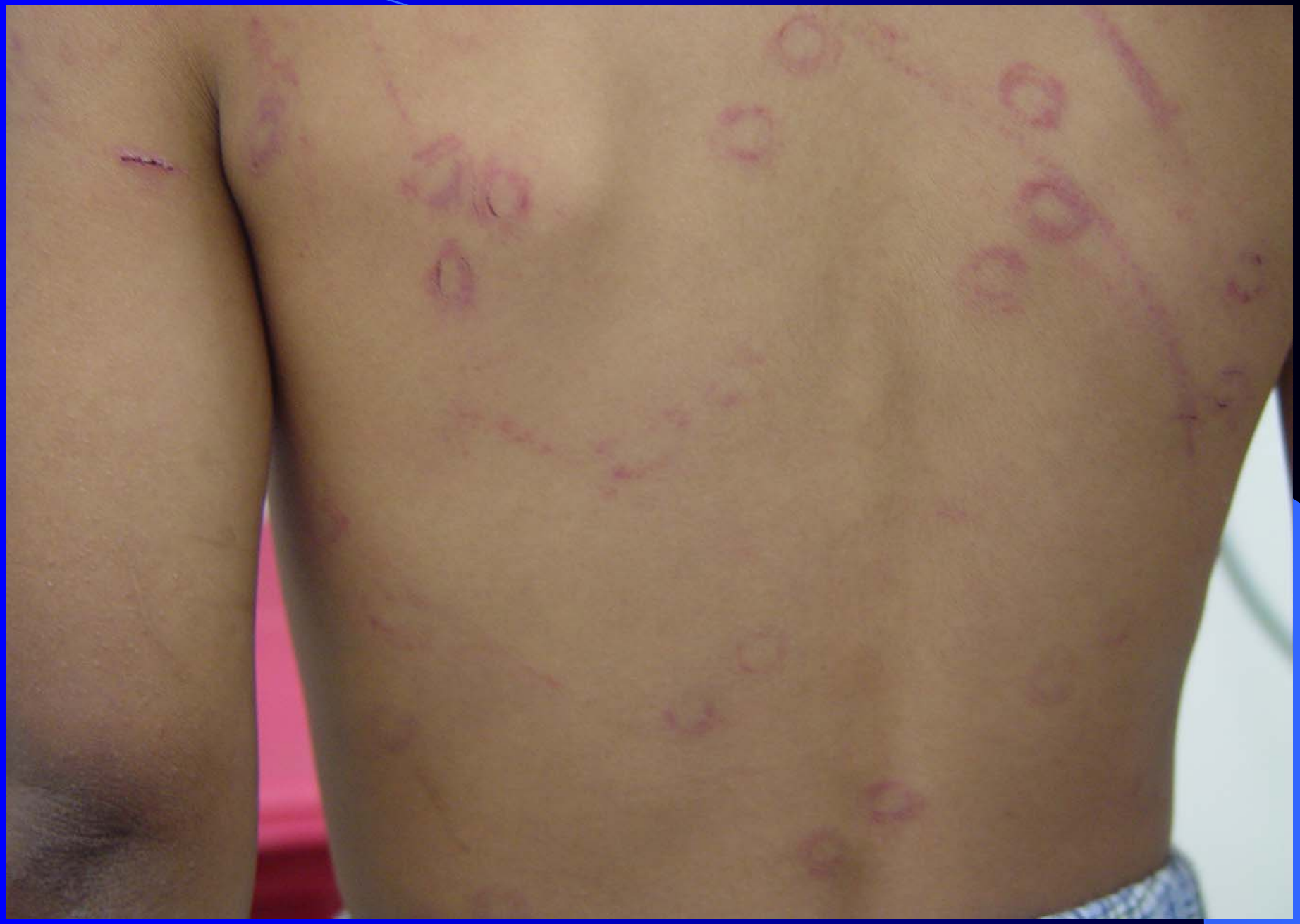

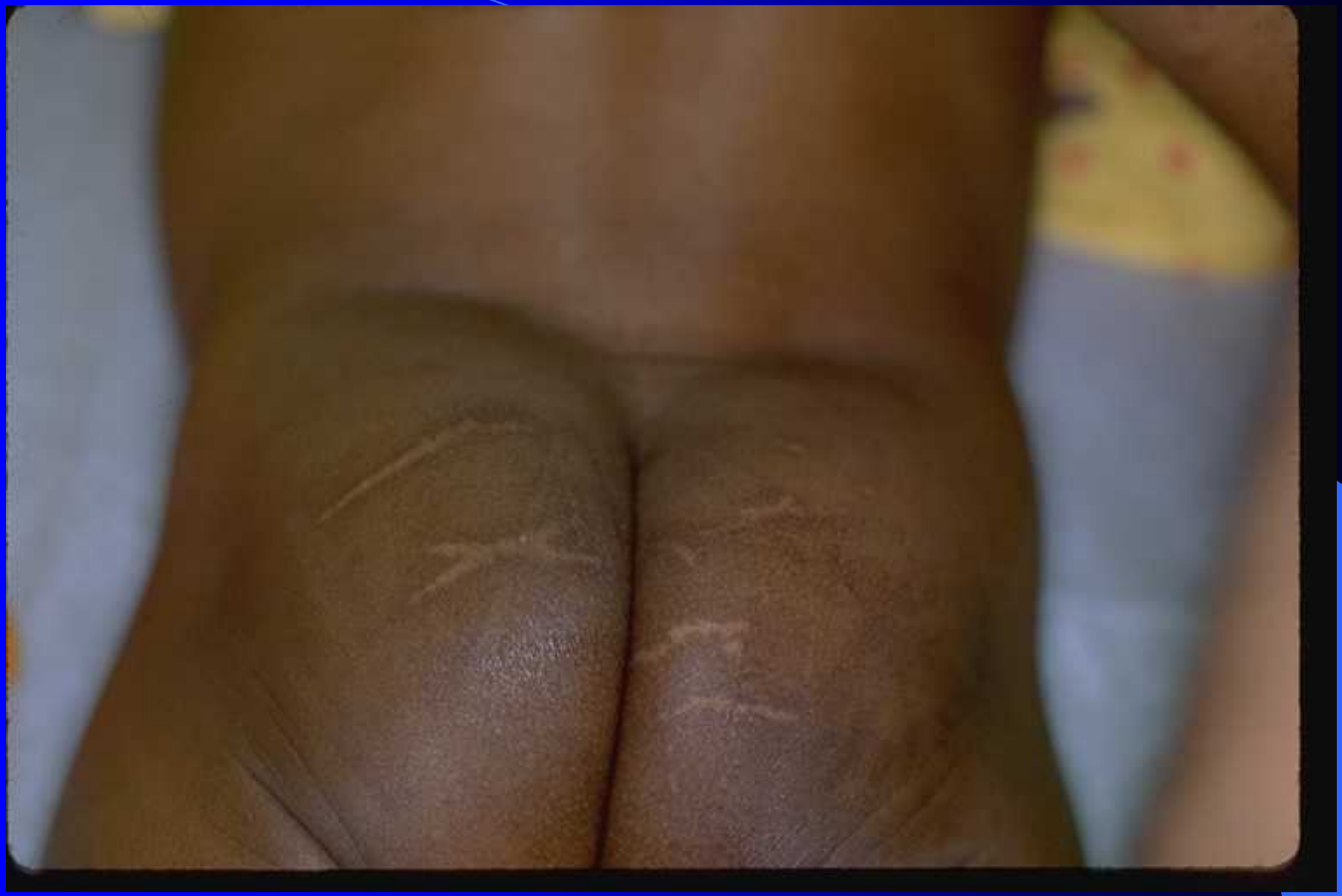

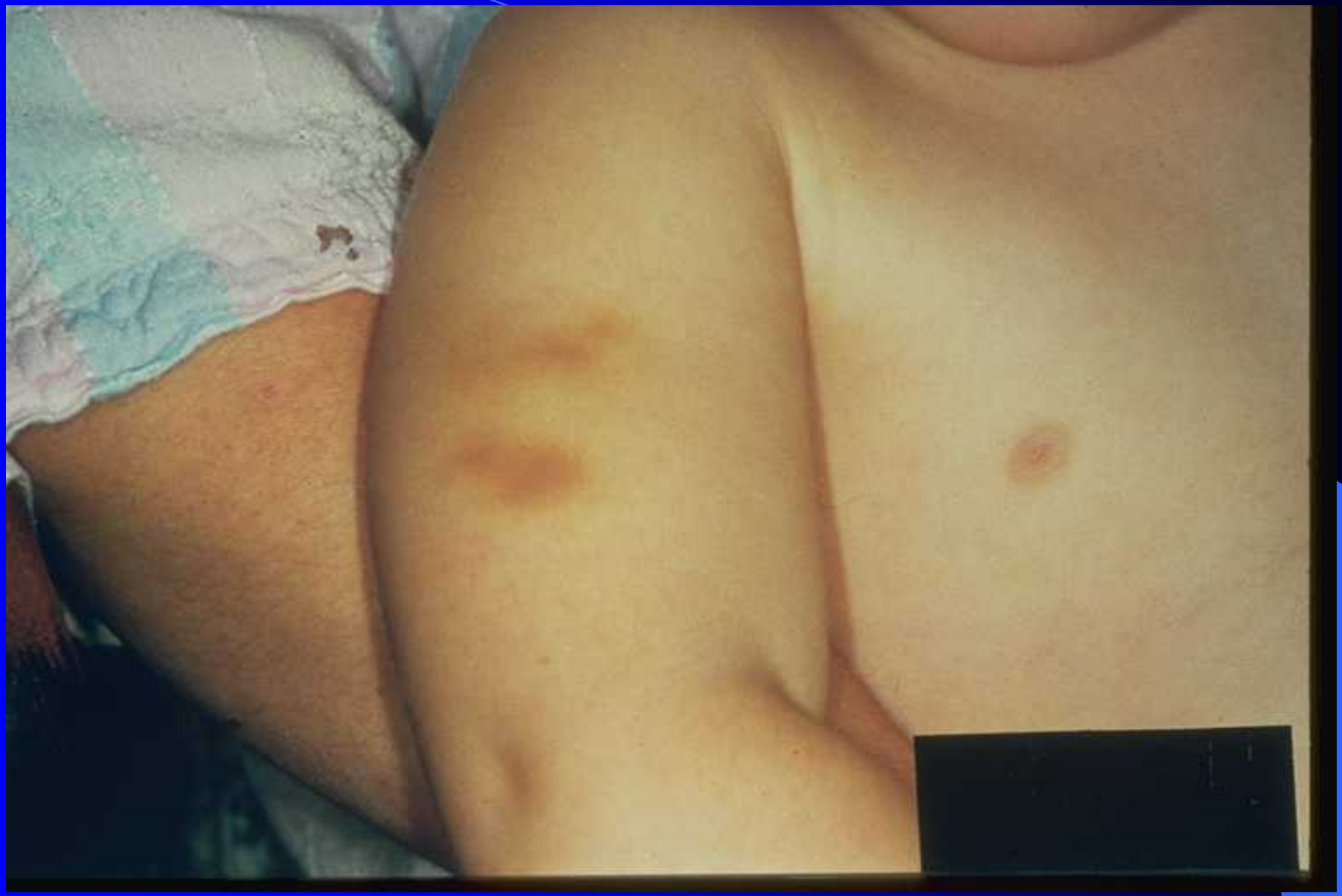

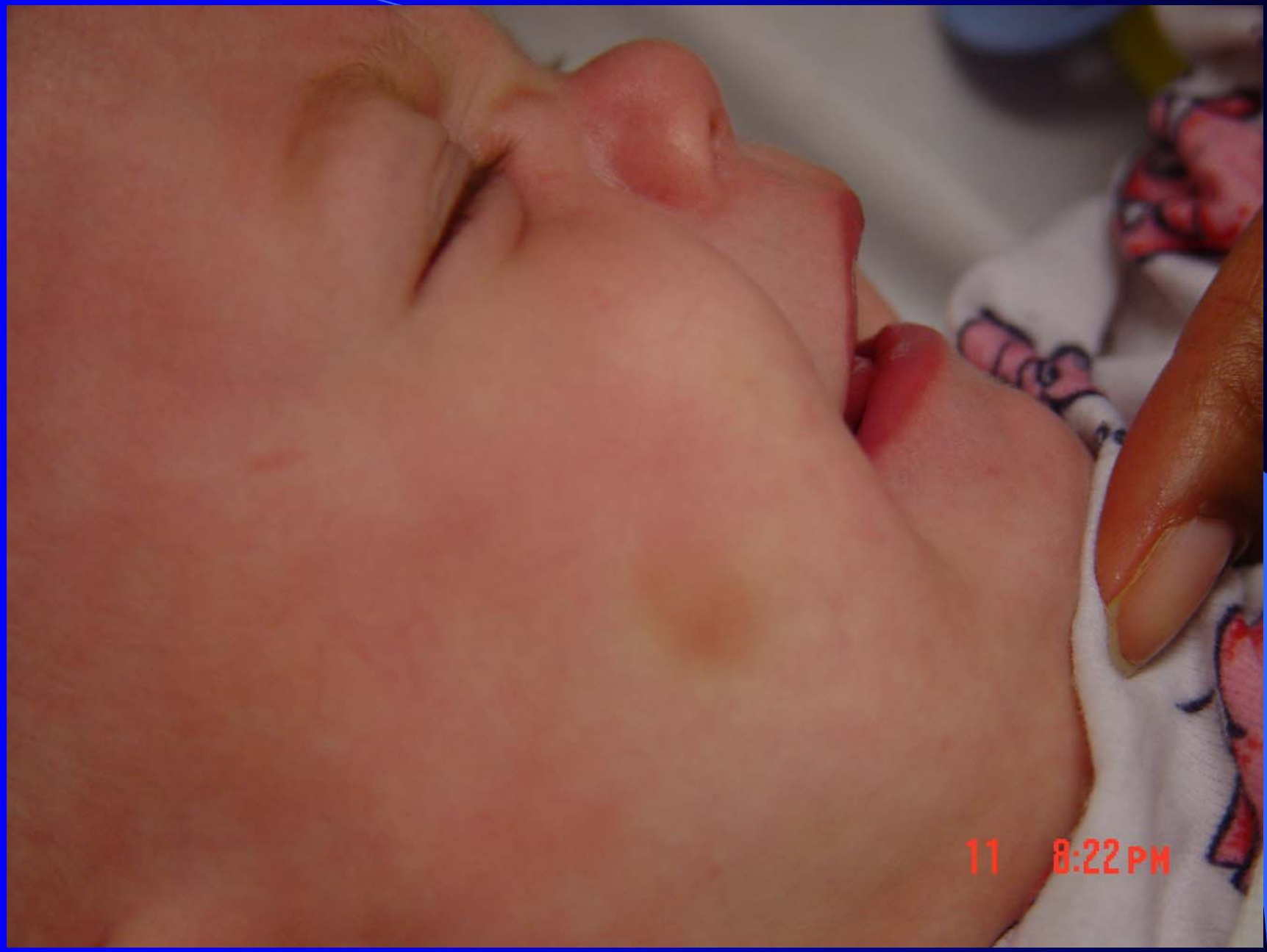
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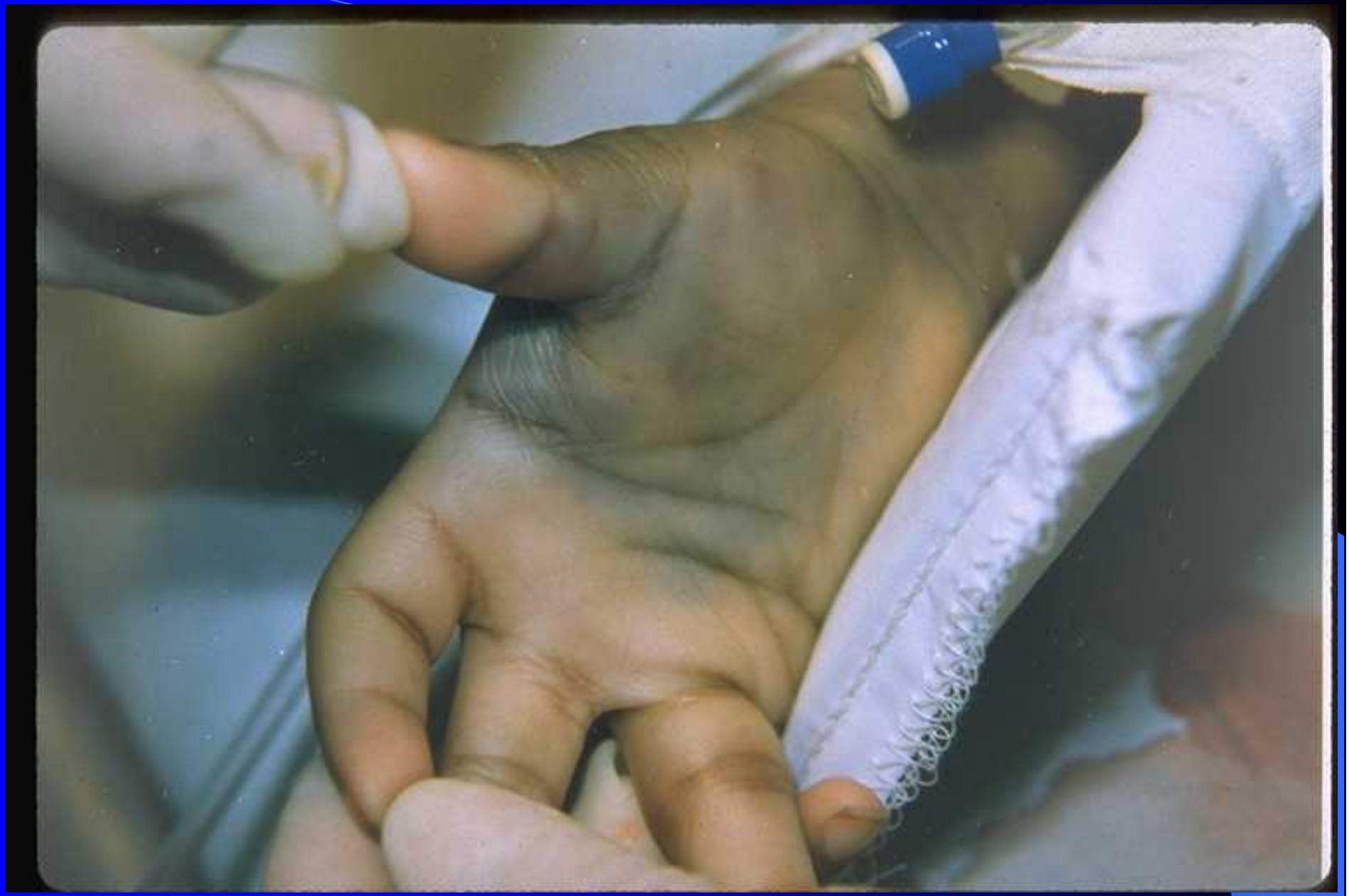

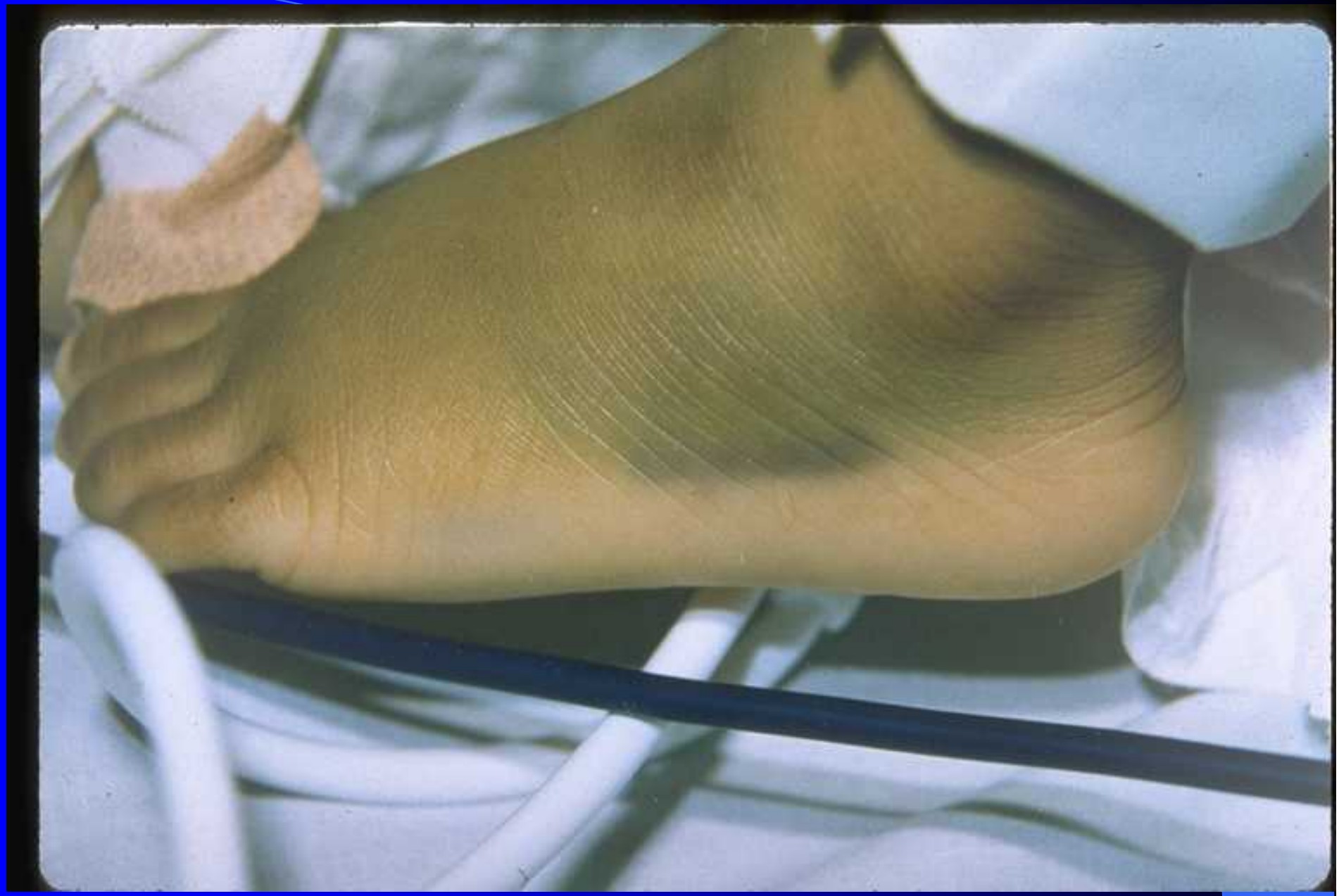

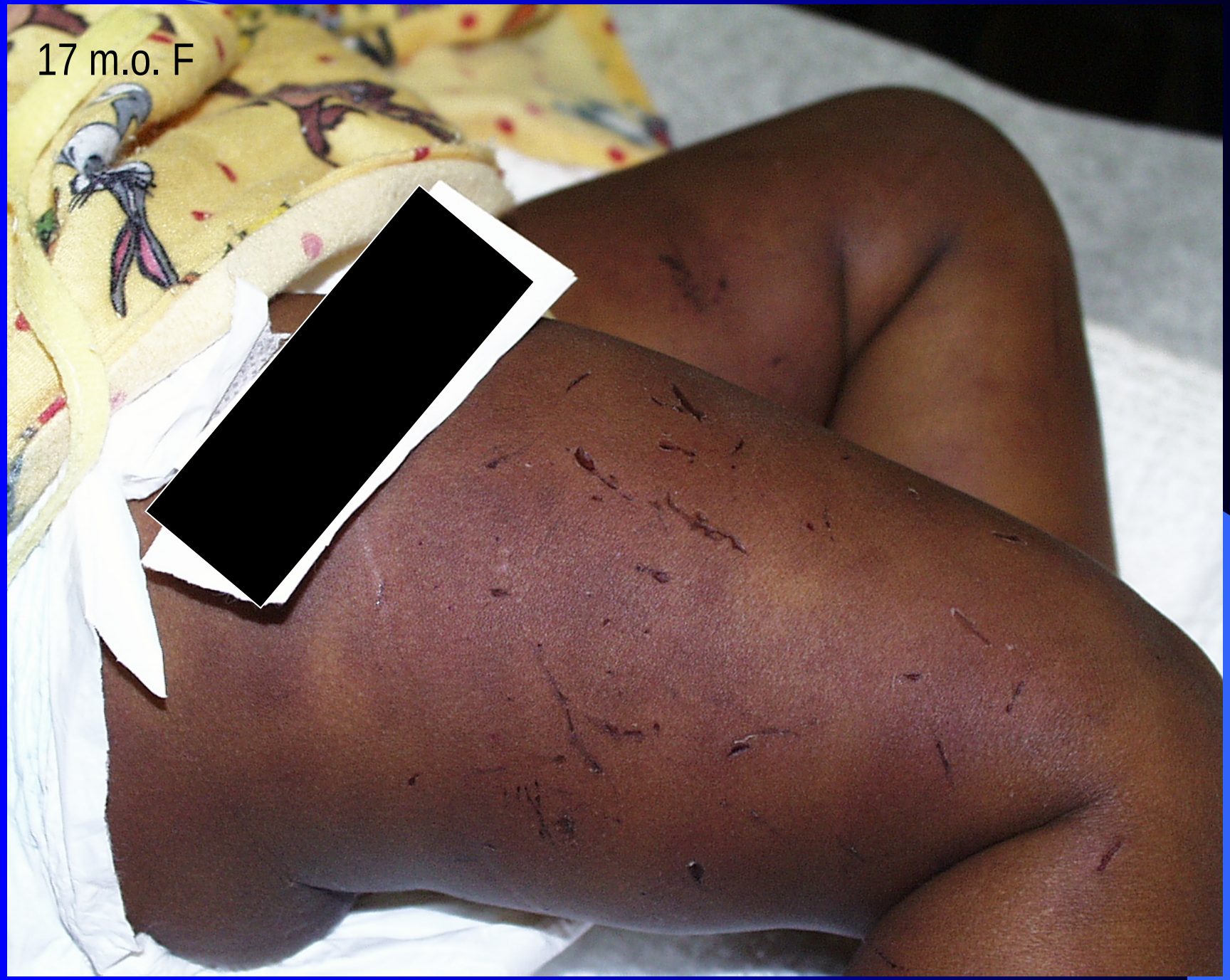
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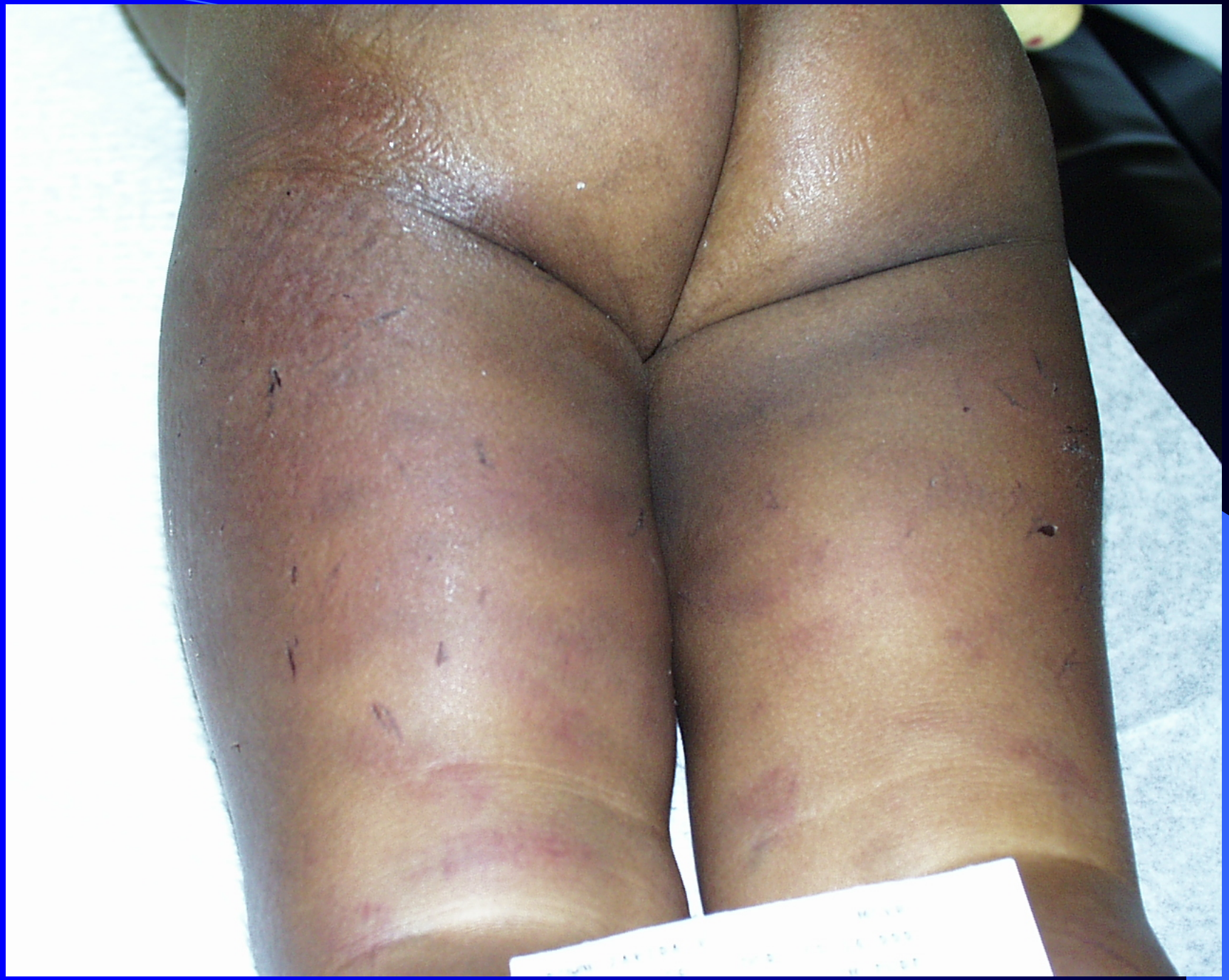
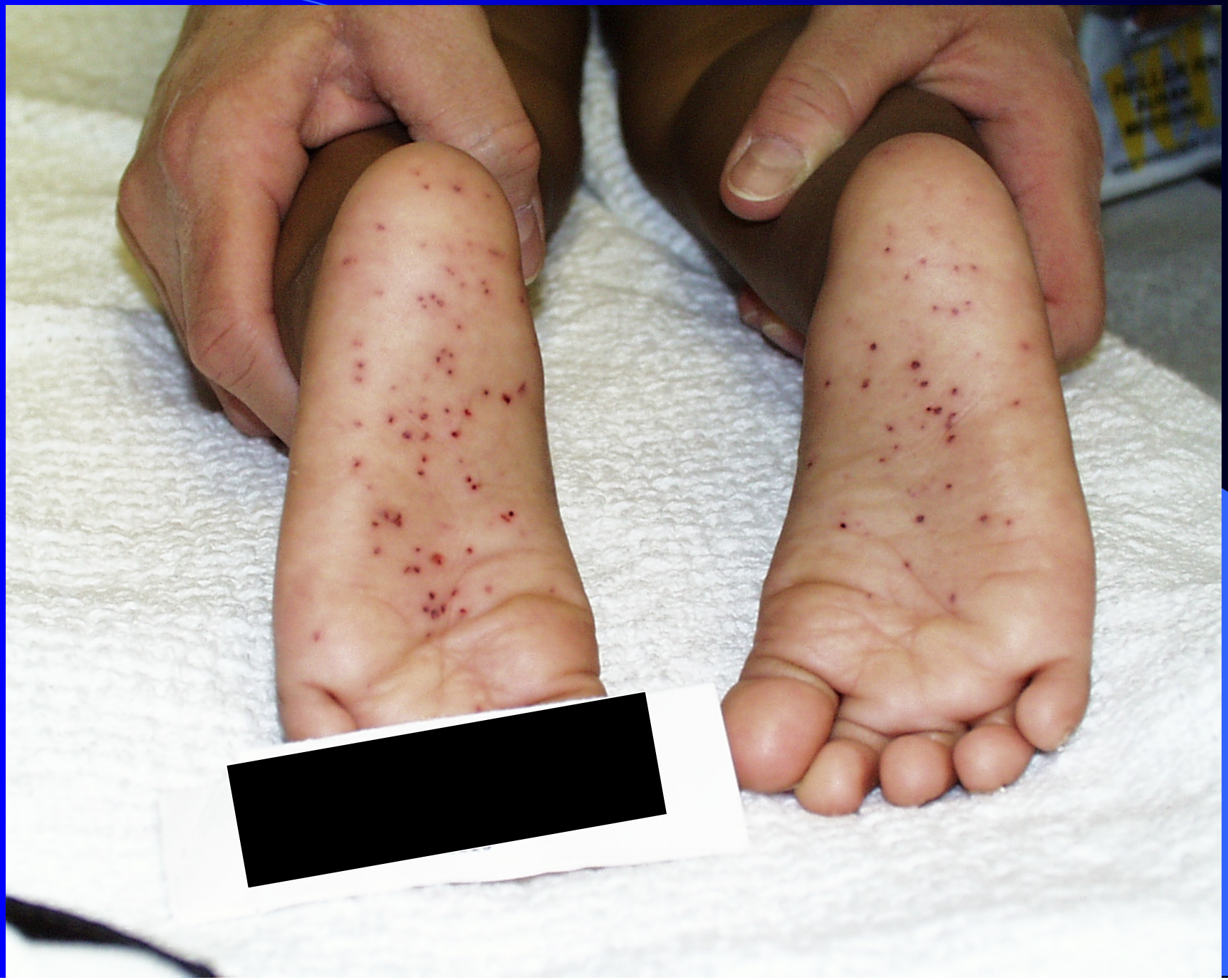
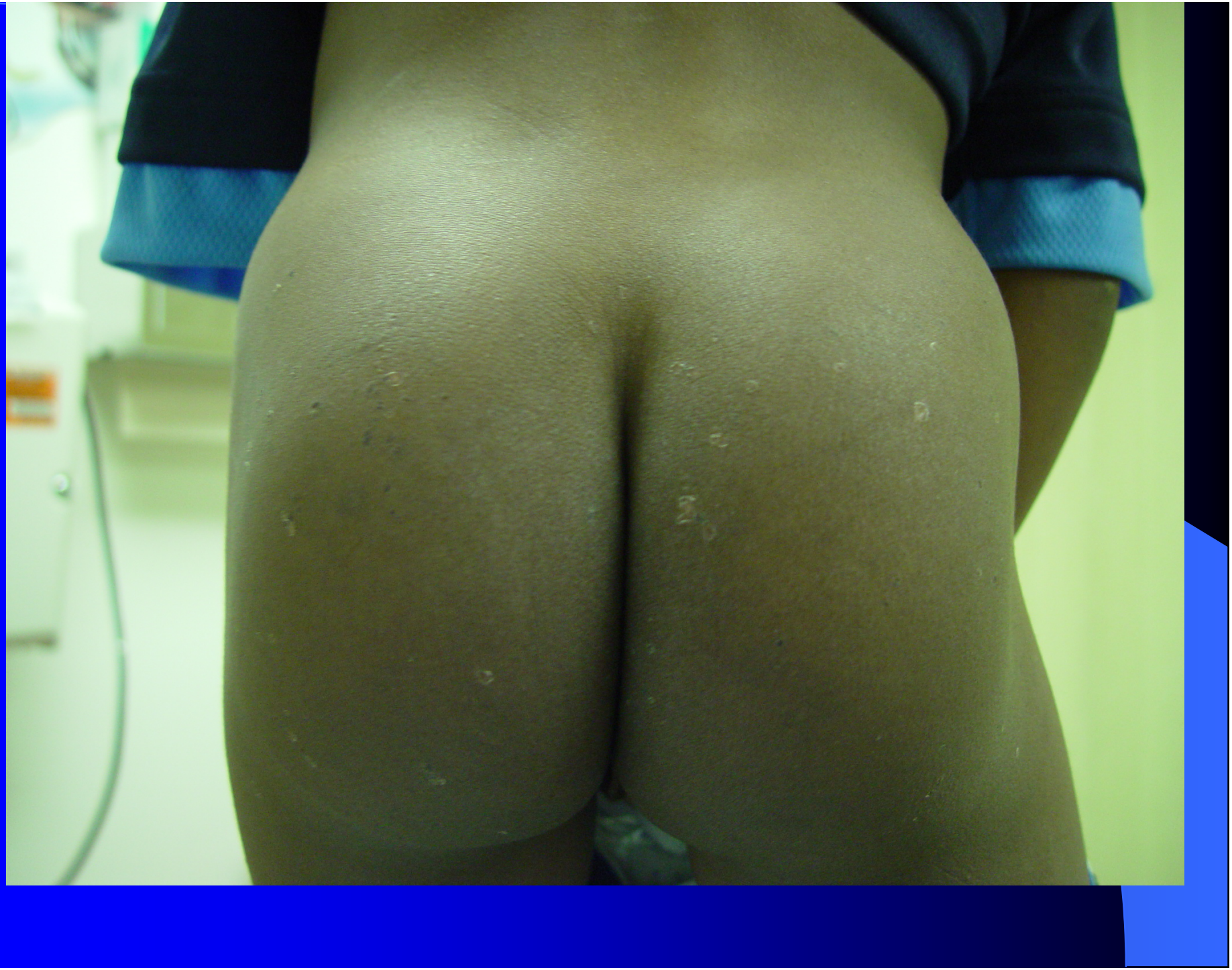
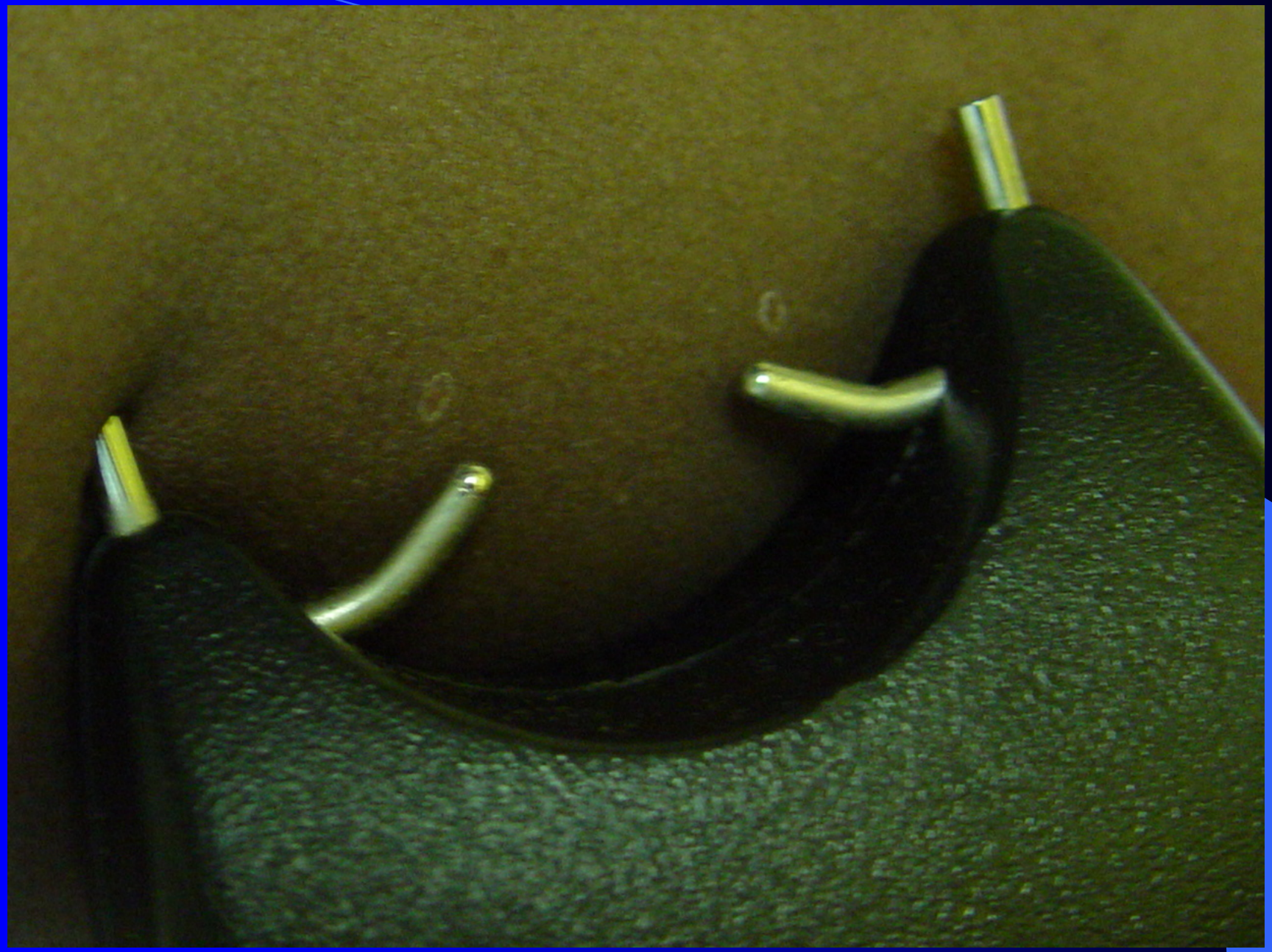
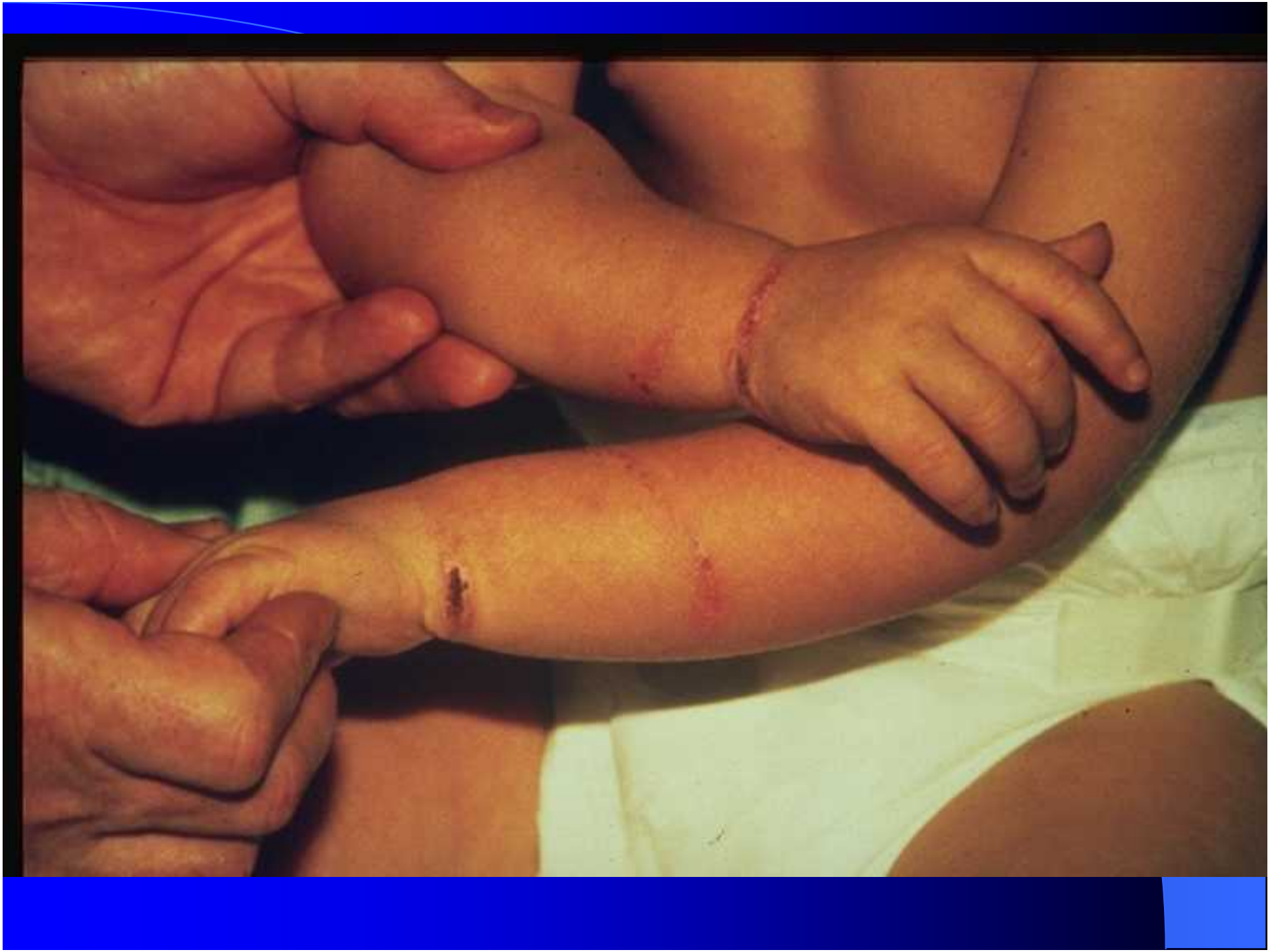
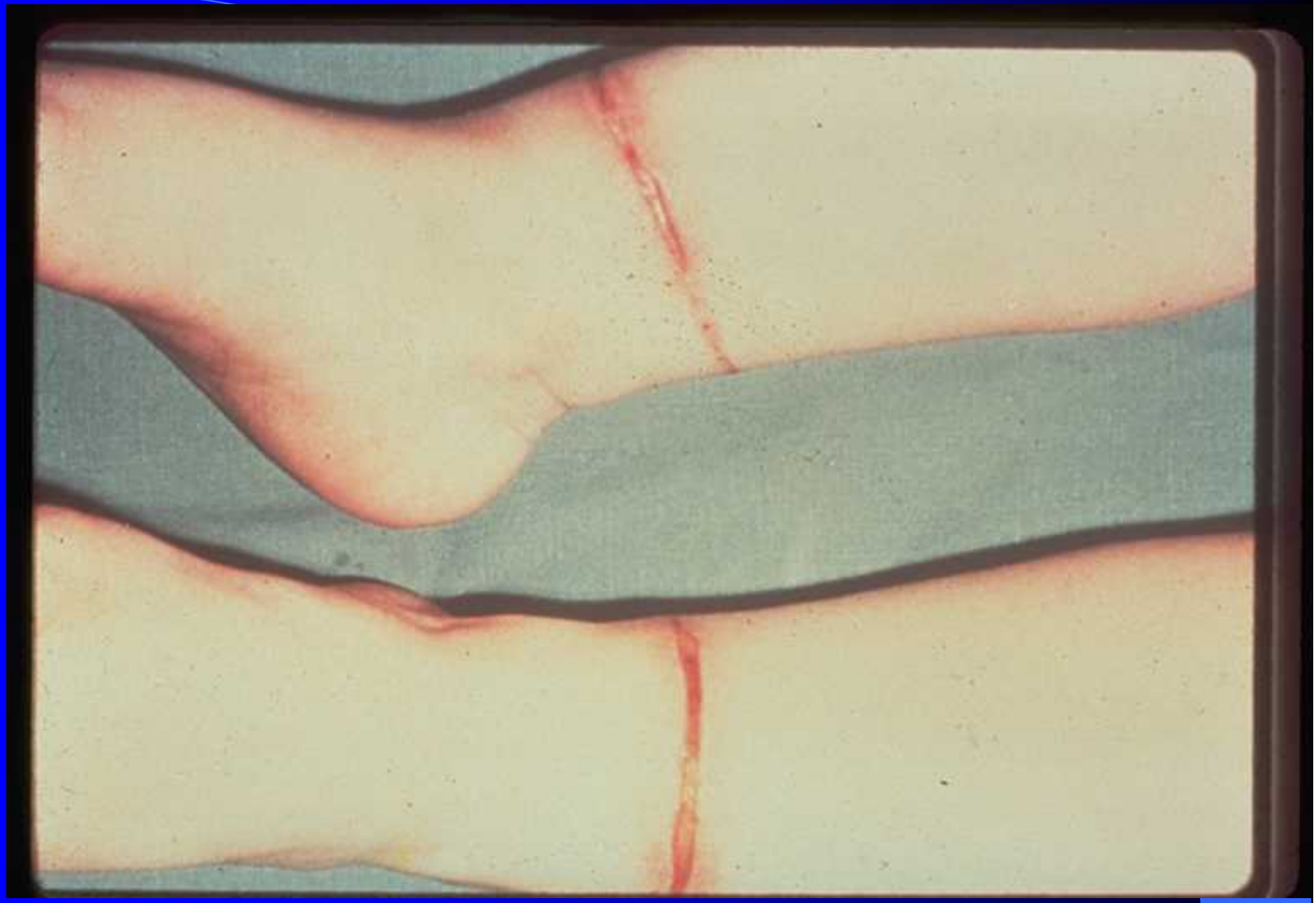


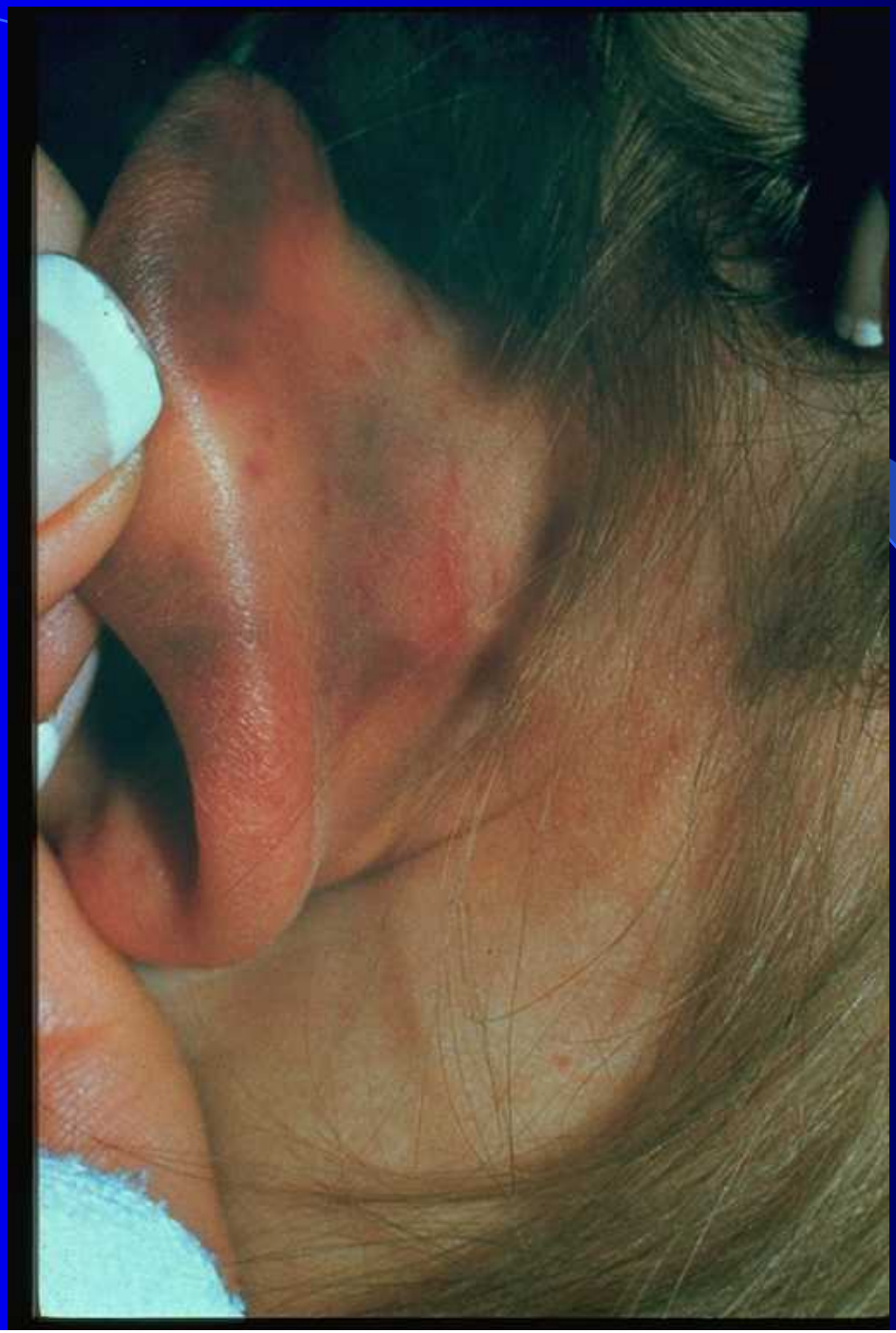


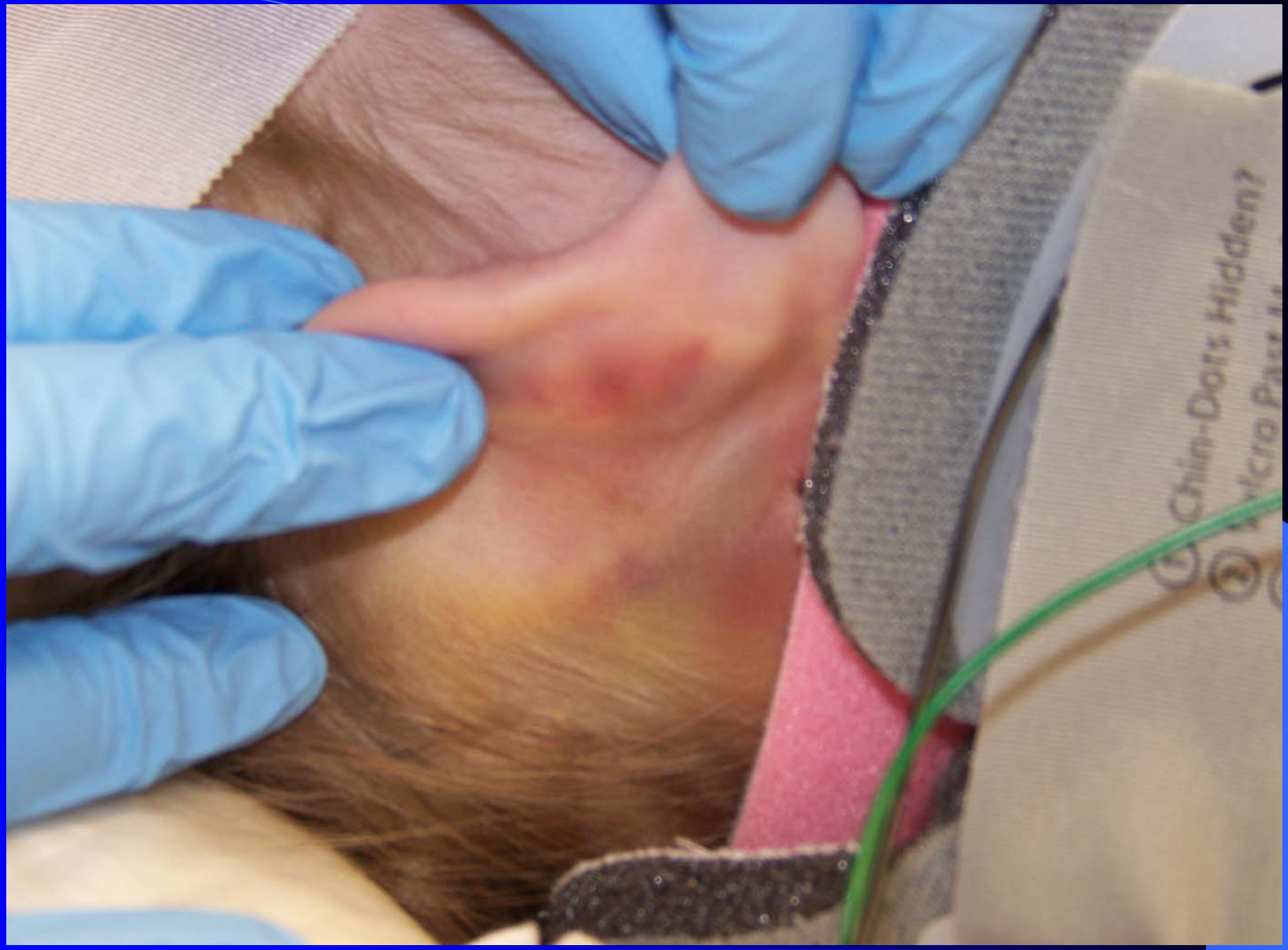


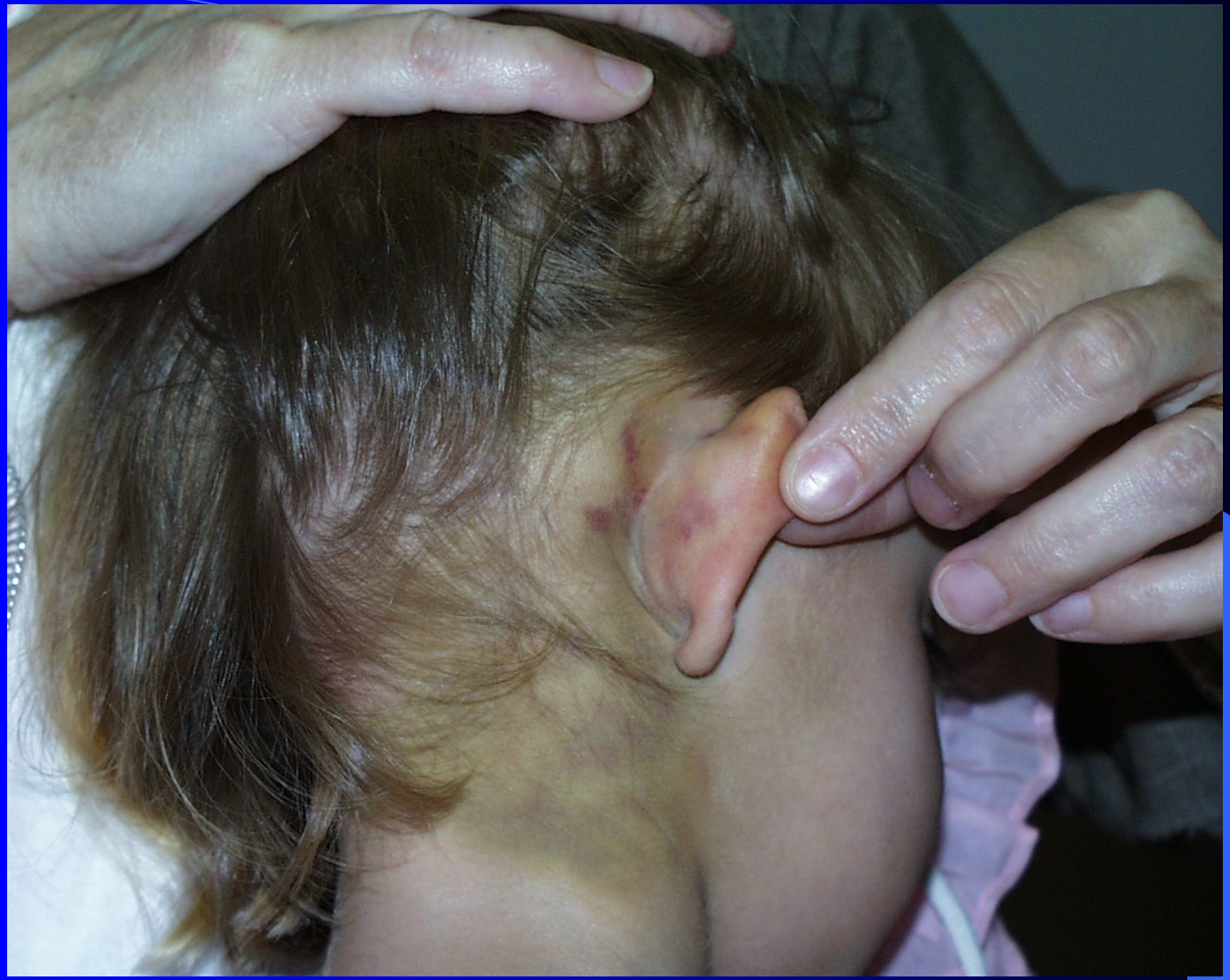


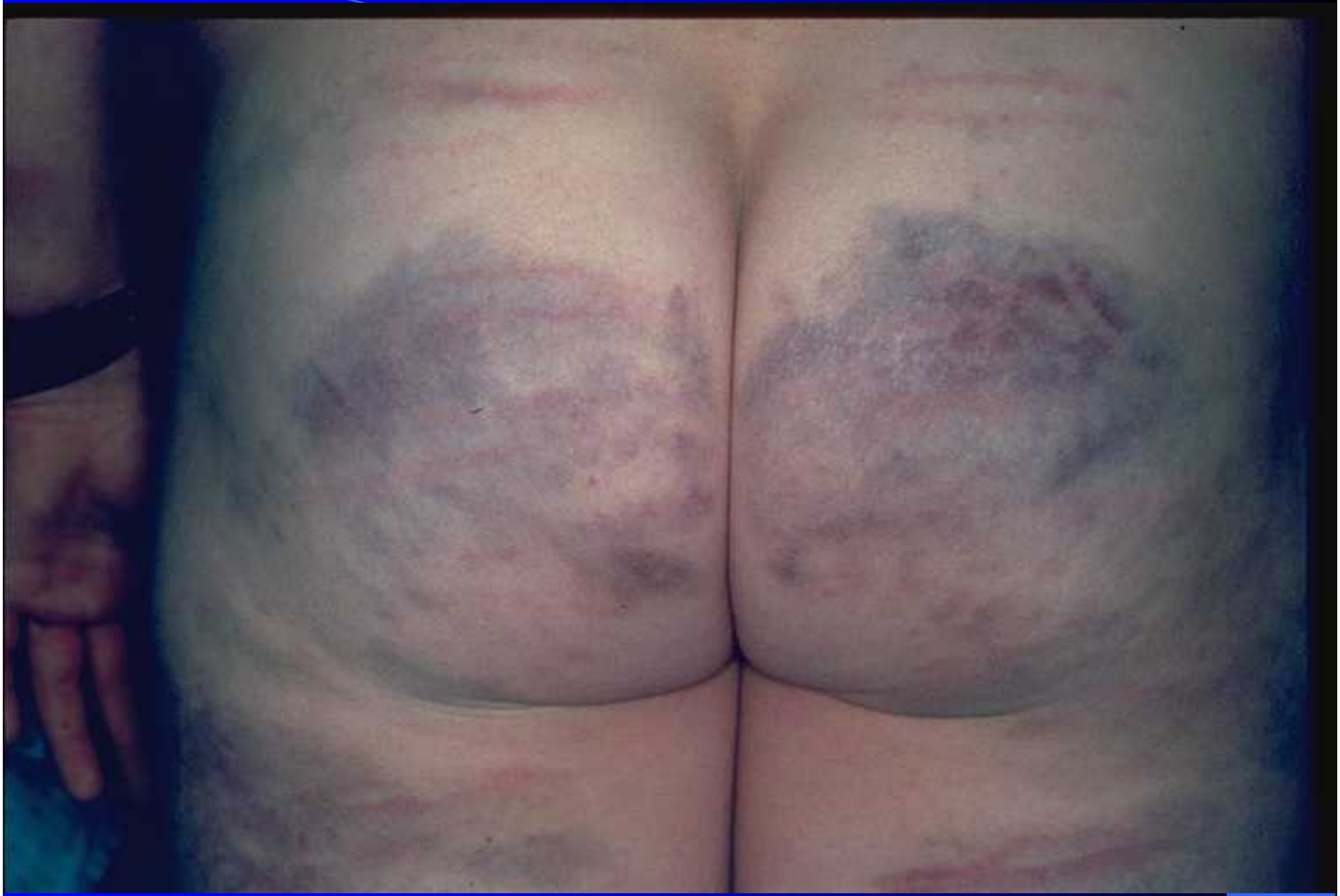







Chin-Dots Hidden?



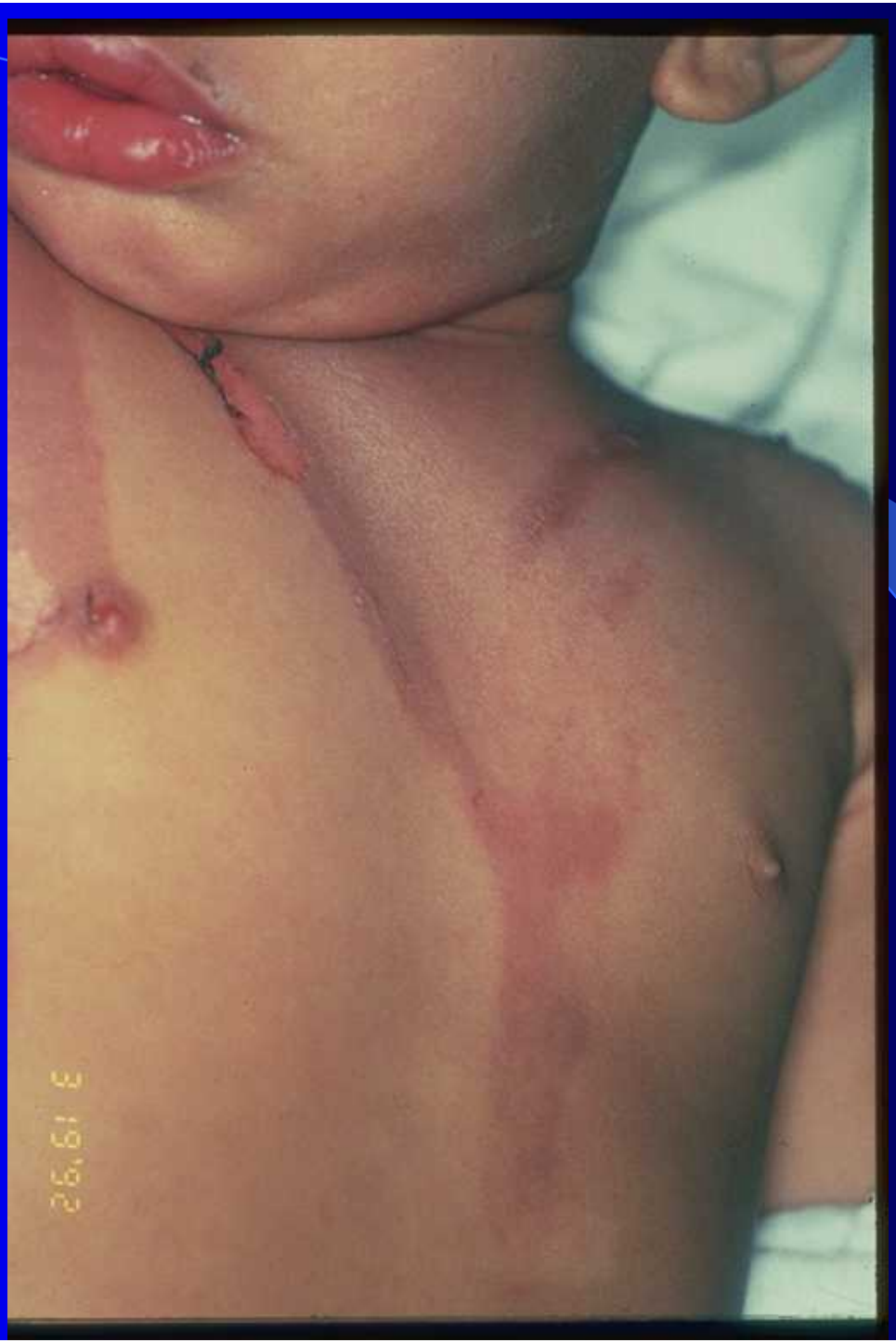


Types of Burns Consistent with Abuse

- Immersion Burns
  - Stocking
  - Glove
  - Perineum
    - Central Sparing
- Contact Burns
- Cigarette Burns

Suspicious Burns

- Delay in seeking treatment > 2 hours
- Burn appears older than stated age
- The accident was not witnessed
- A sibling is accused of being responsible
- The burn is second or third degree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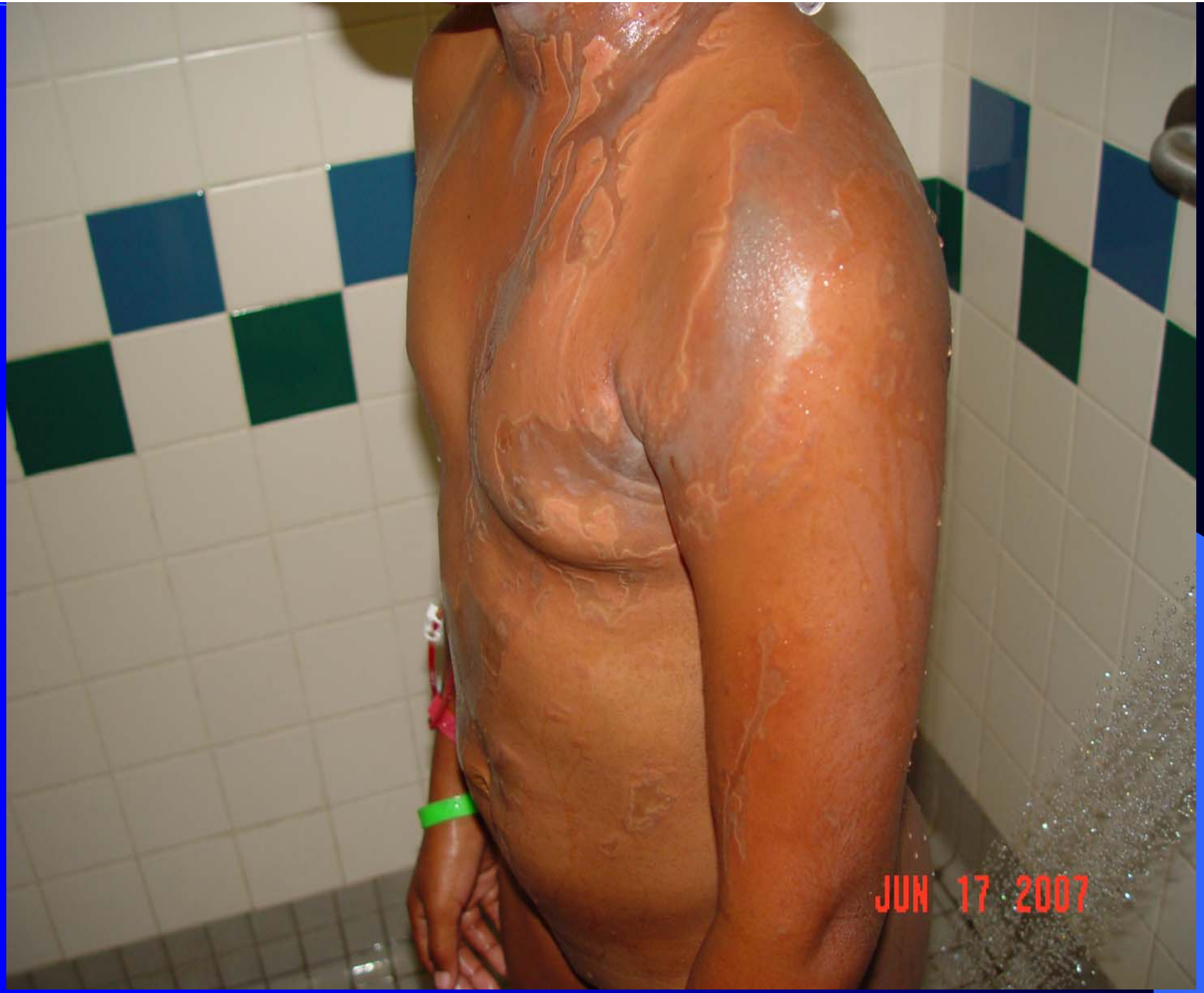
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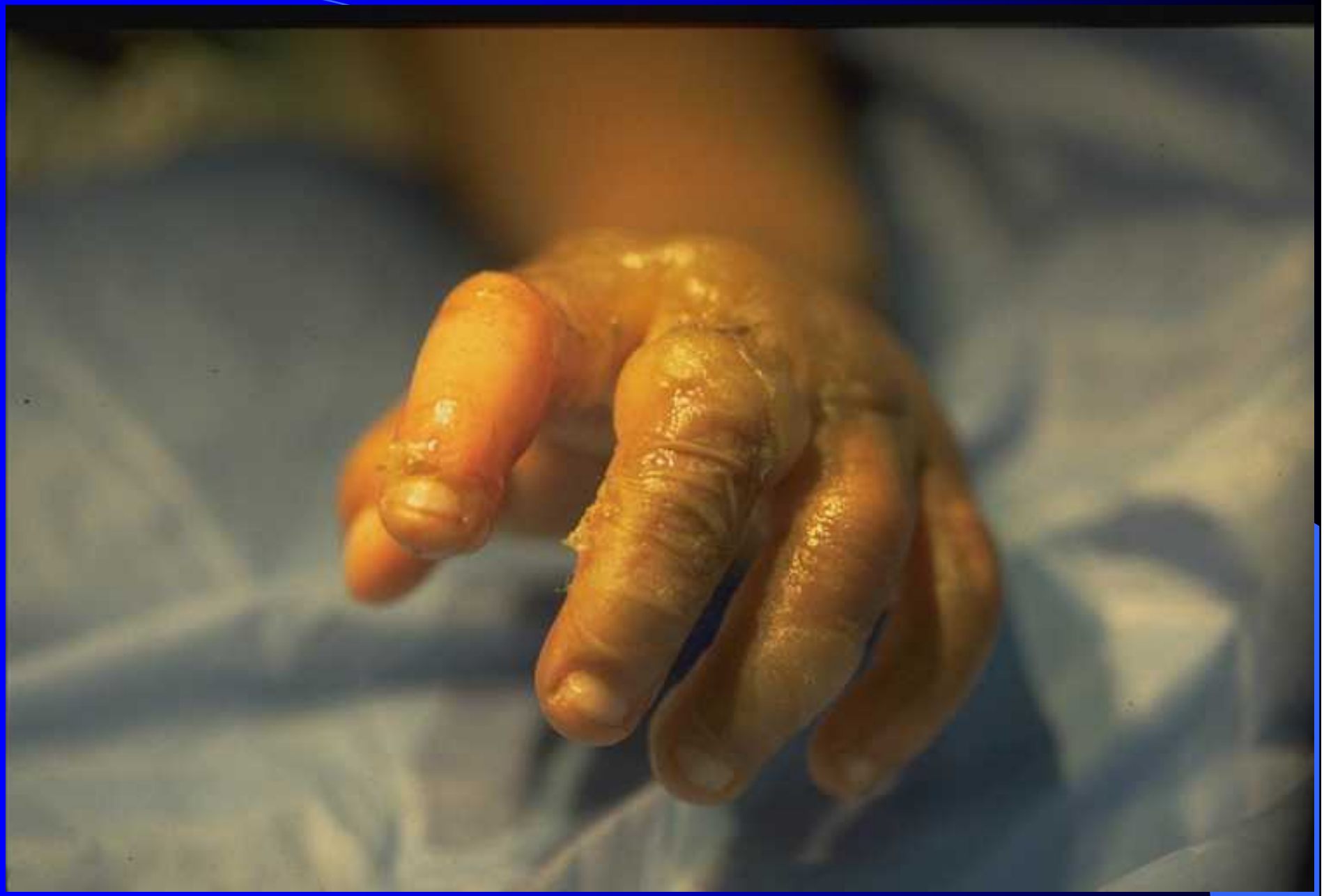
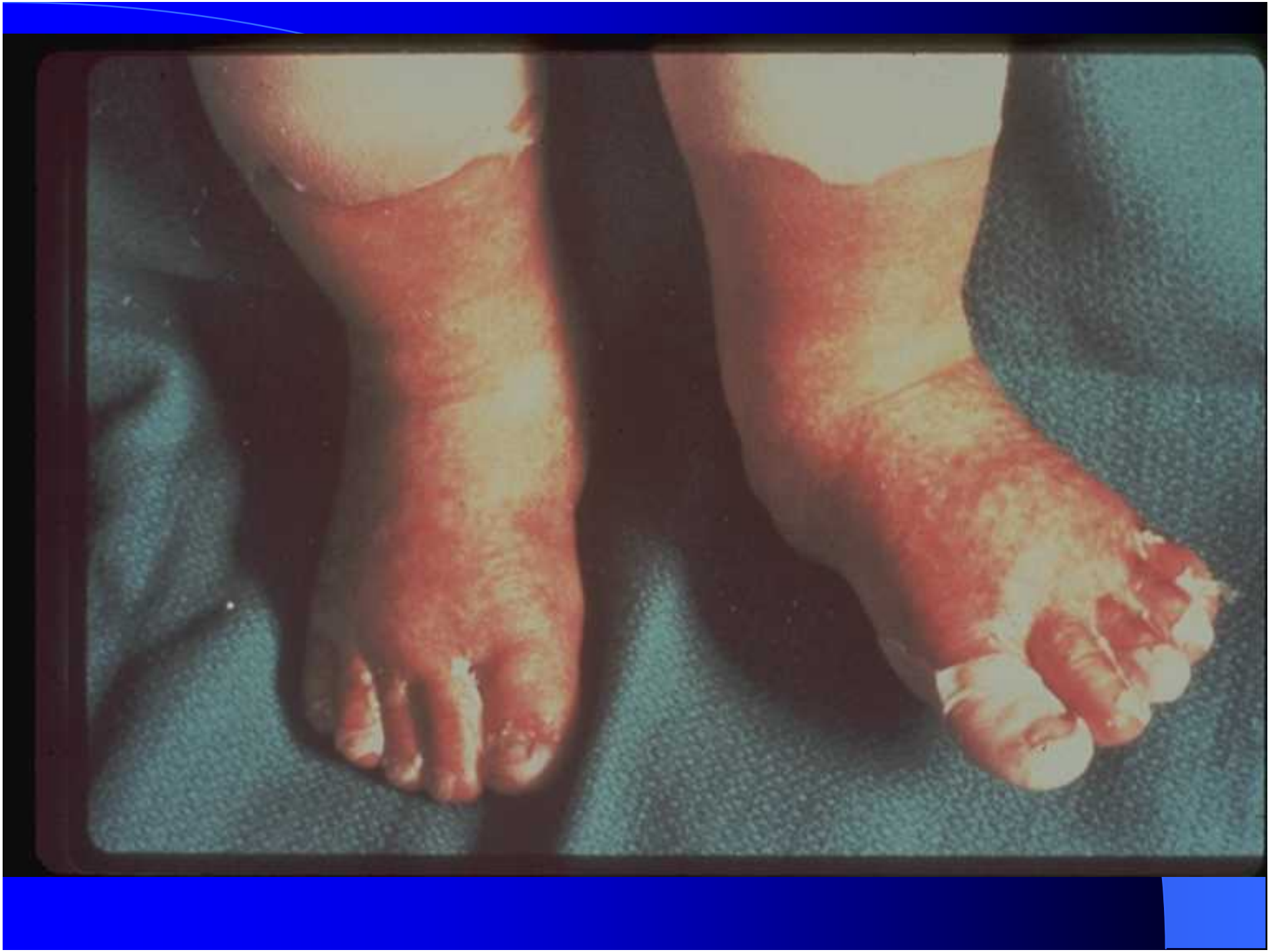
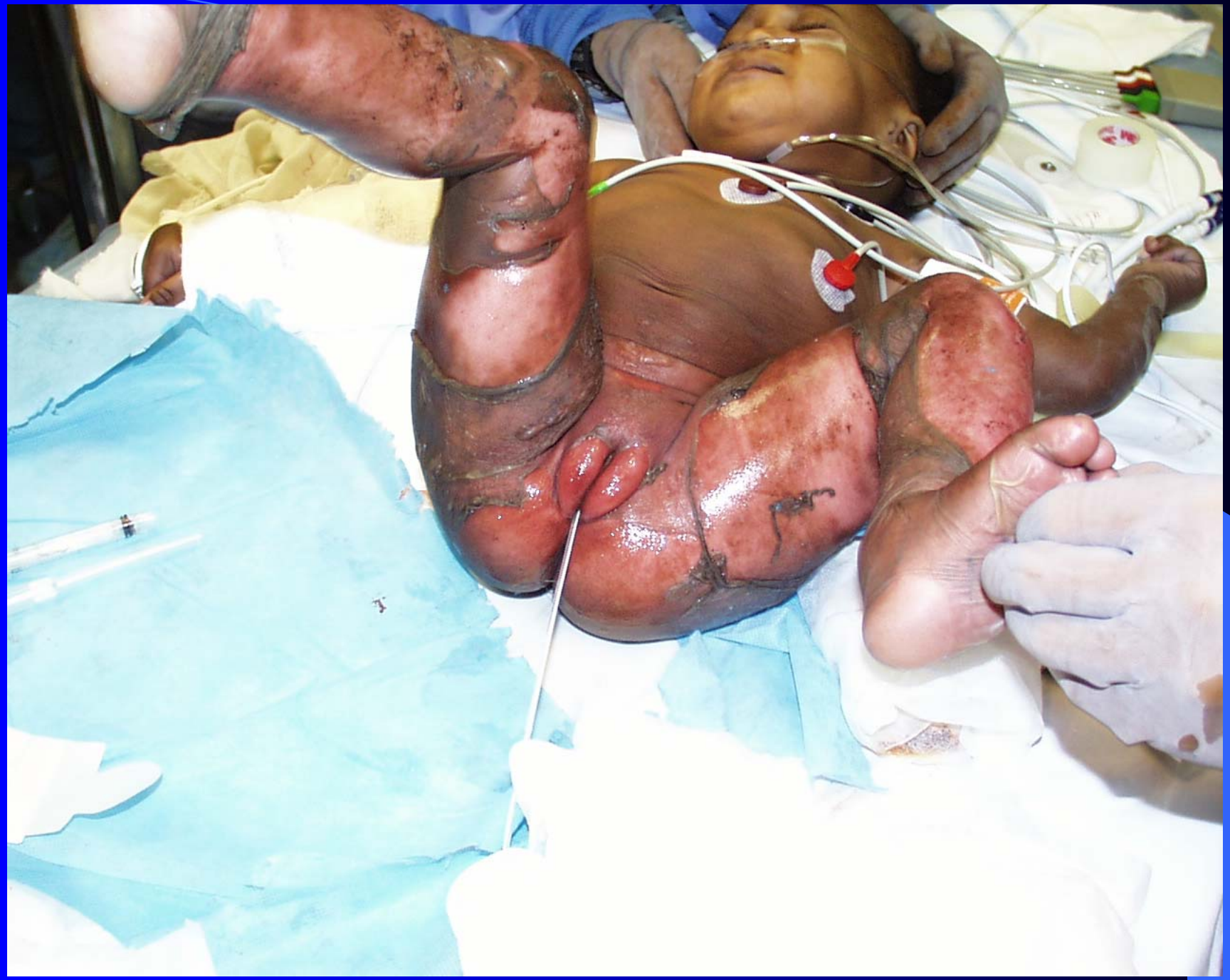
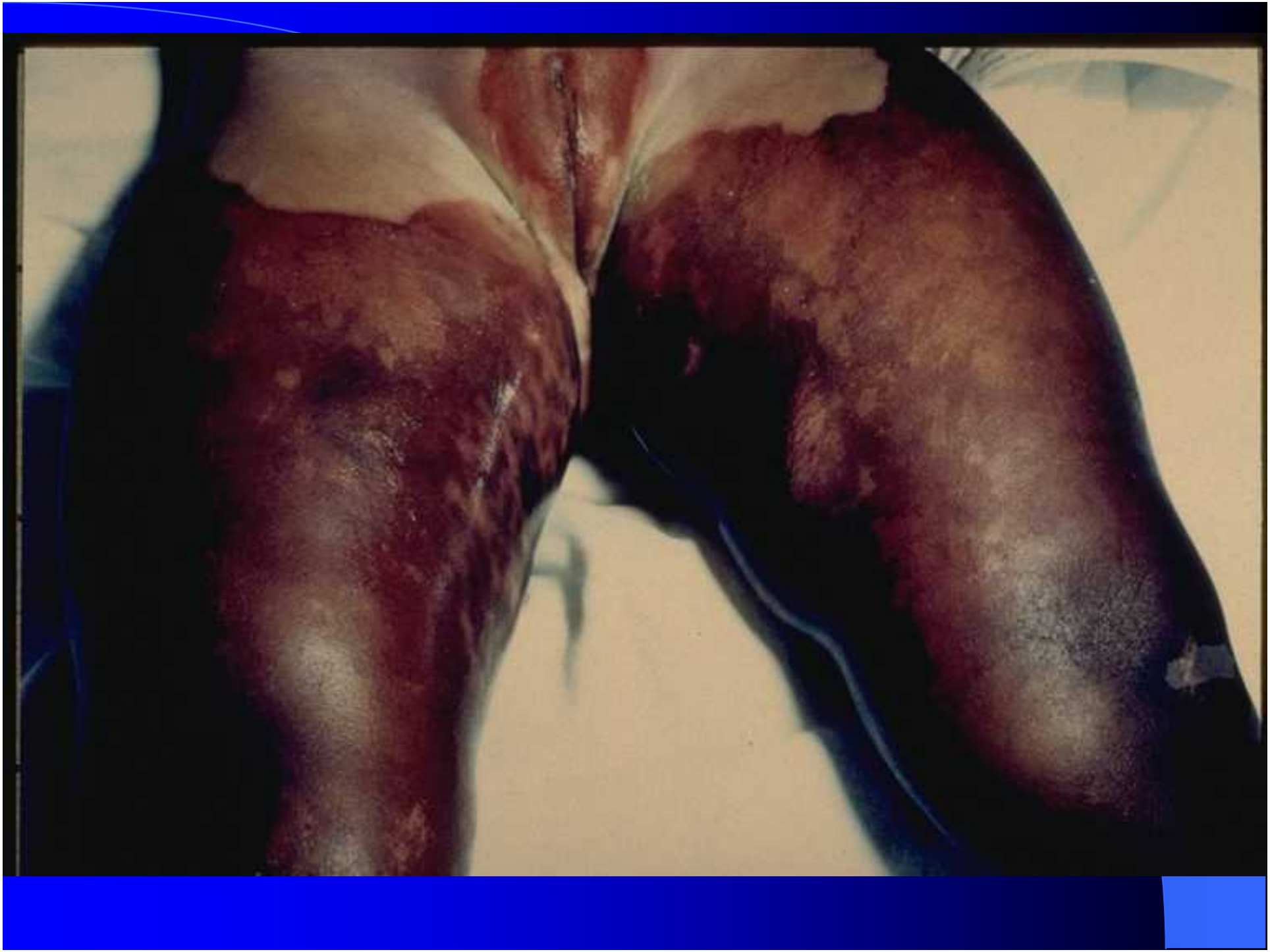
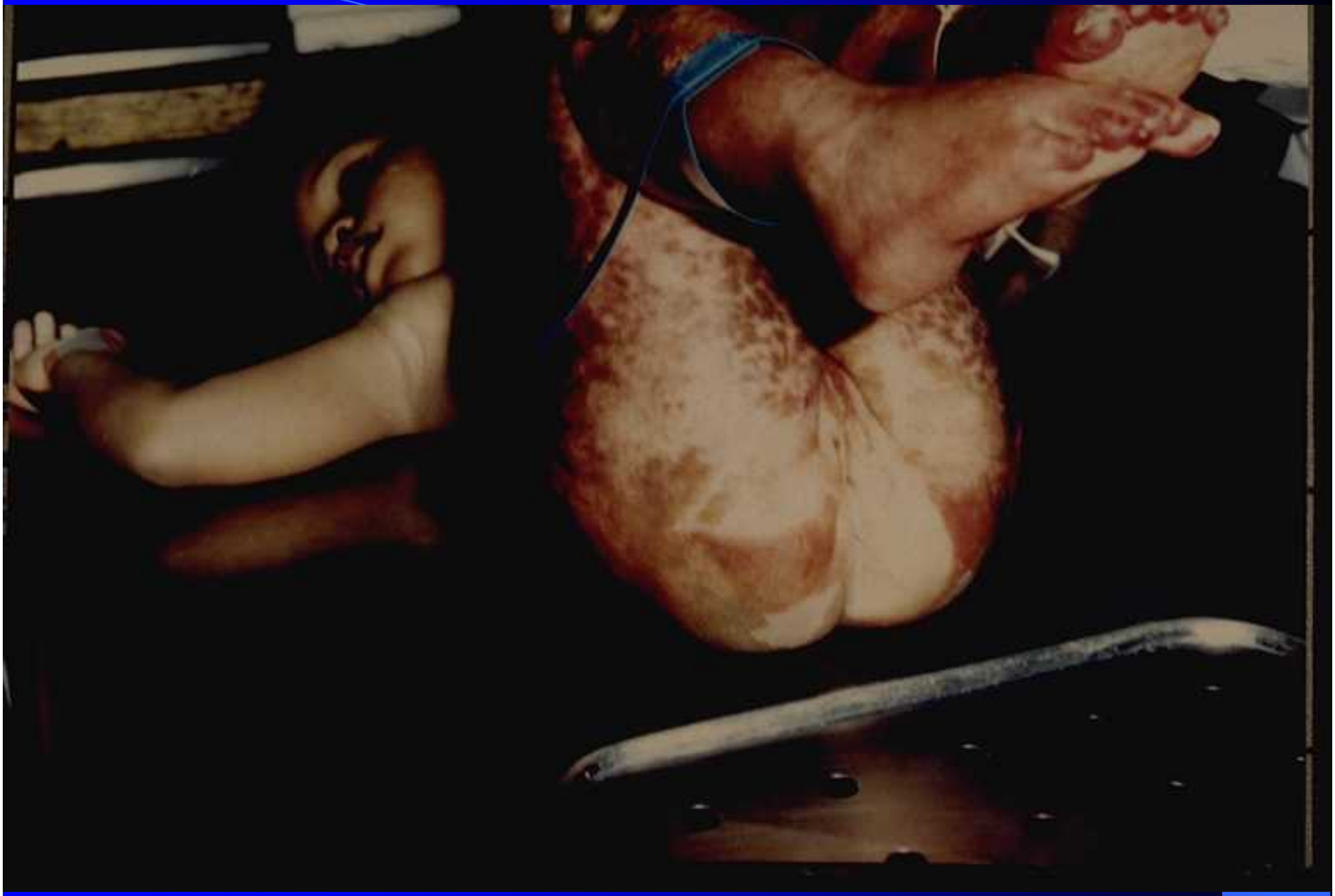


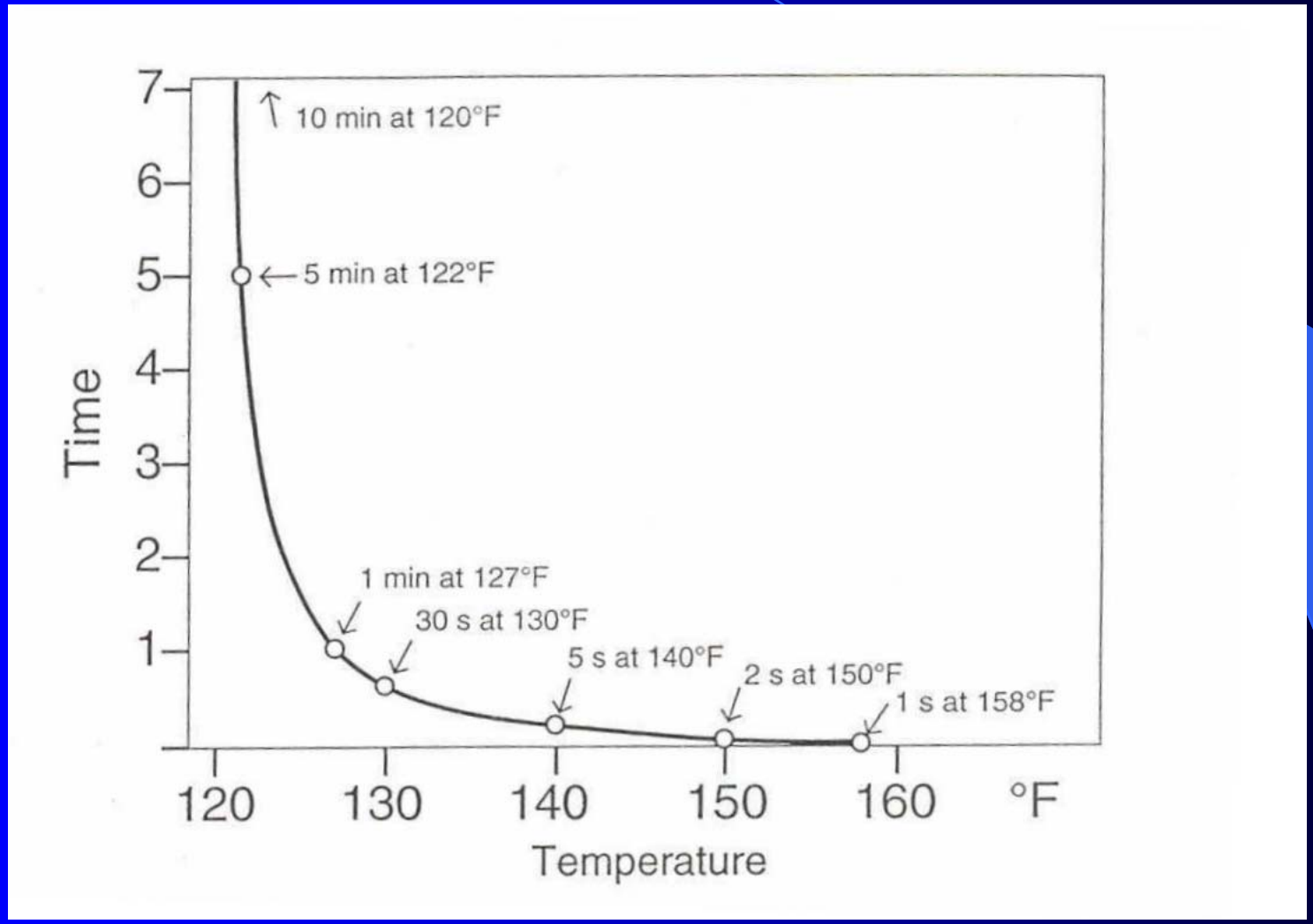




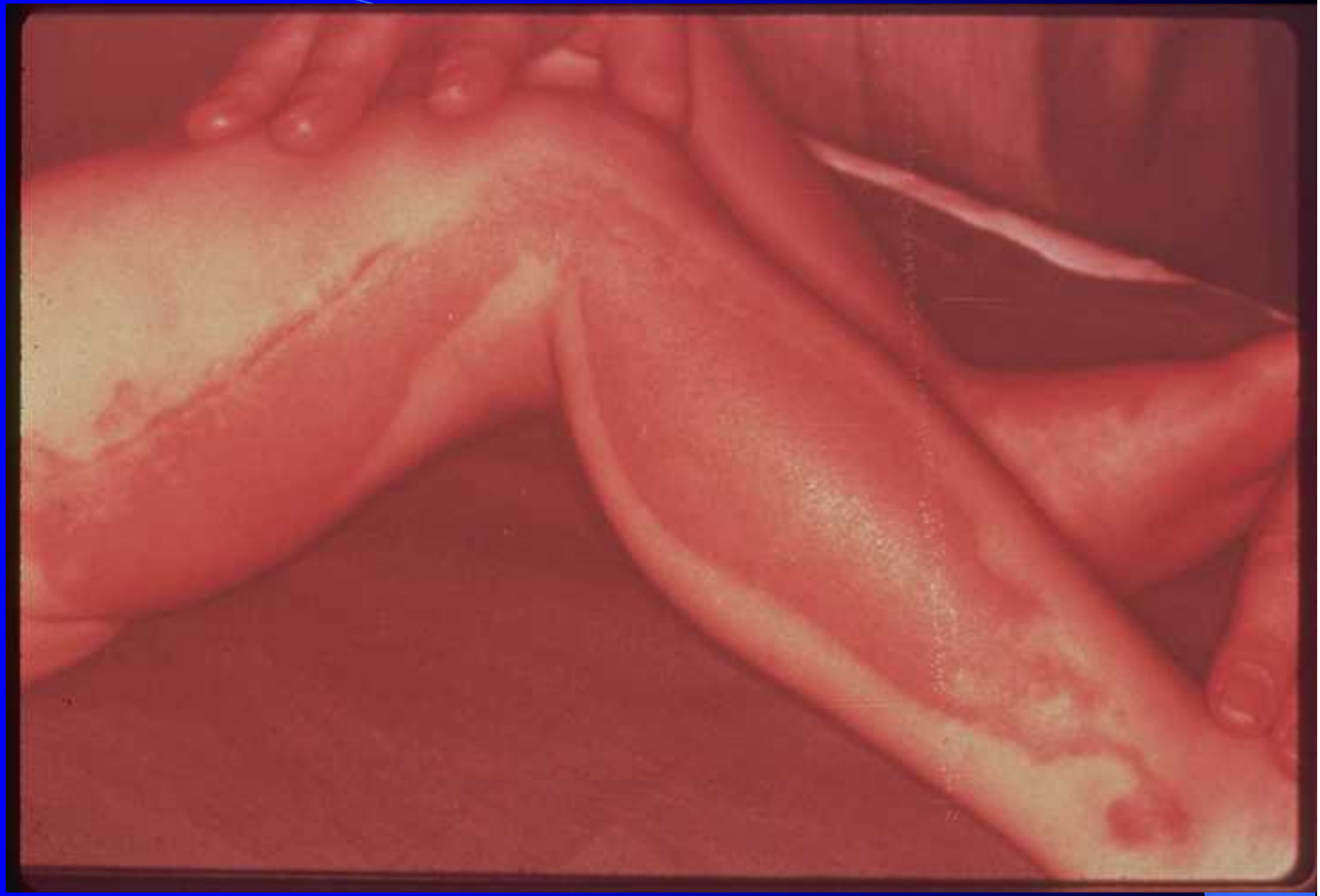


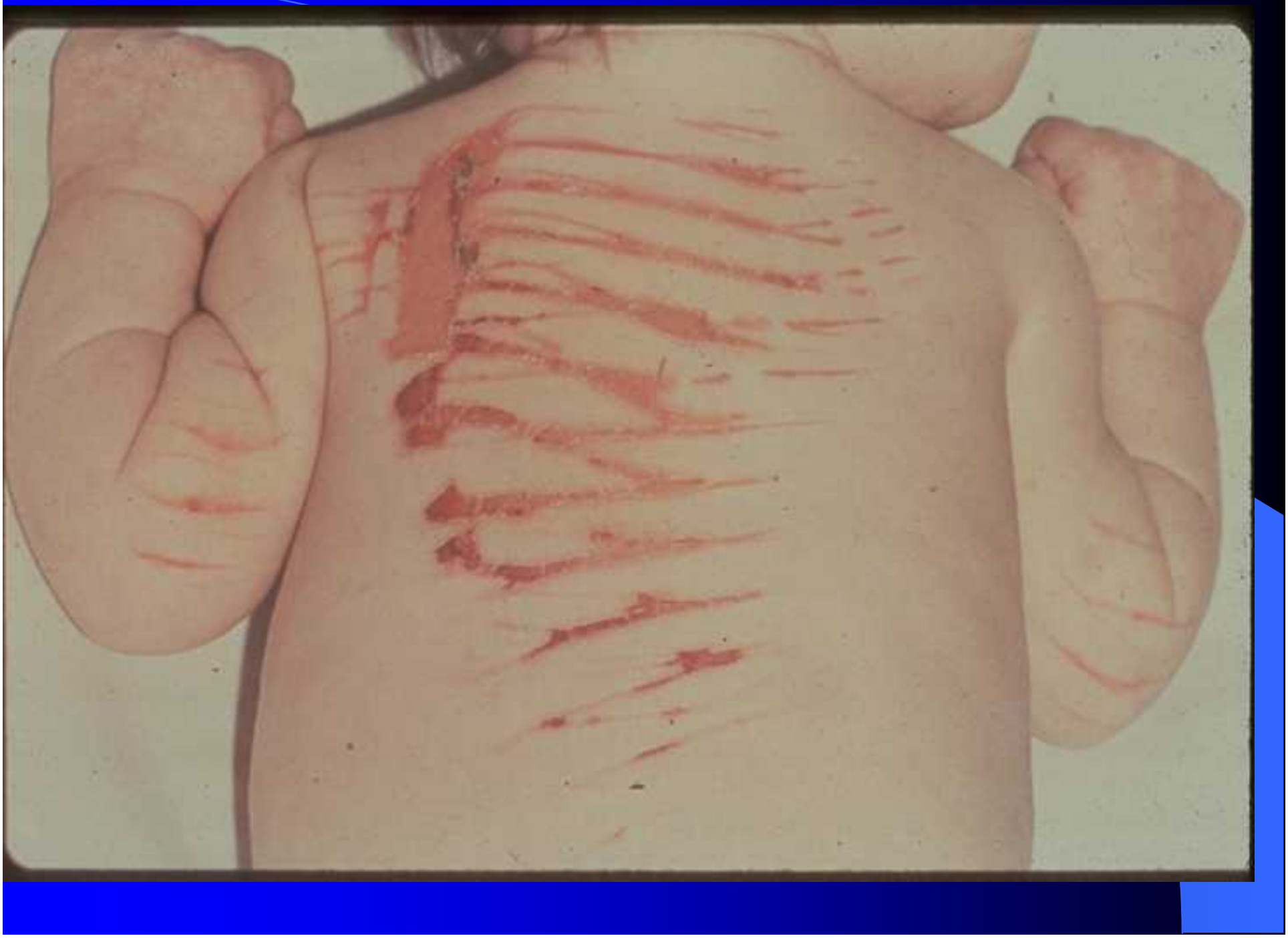


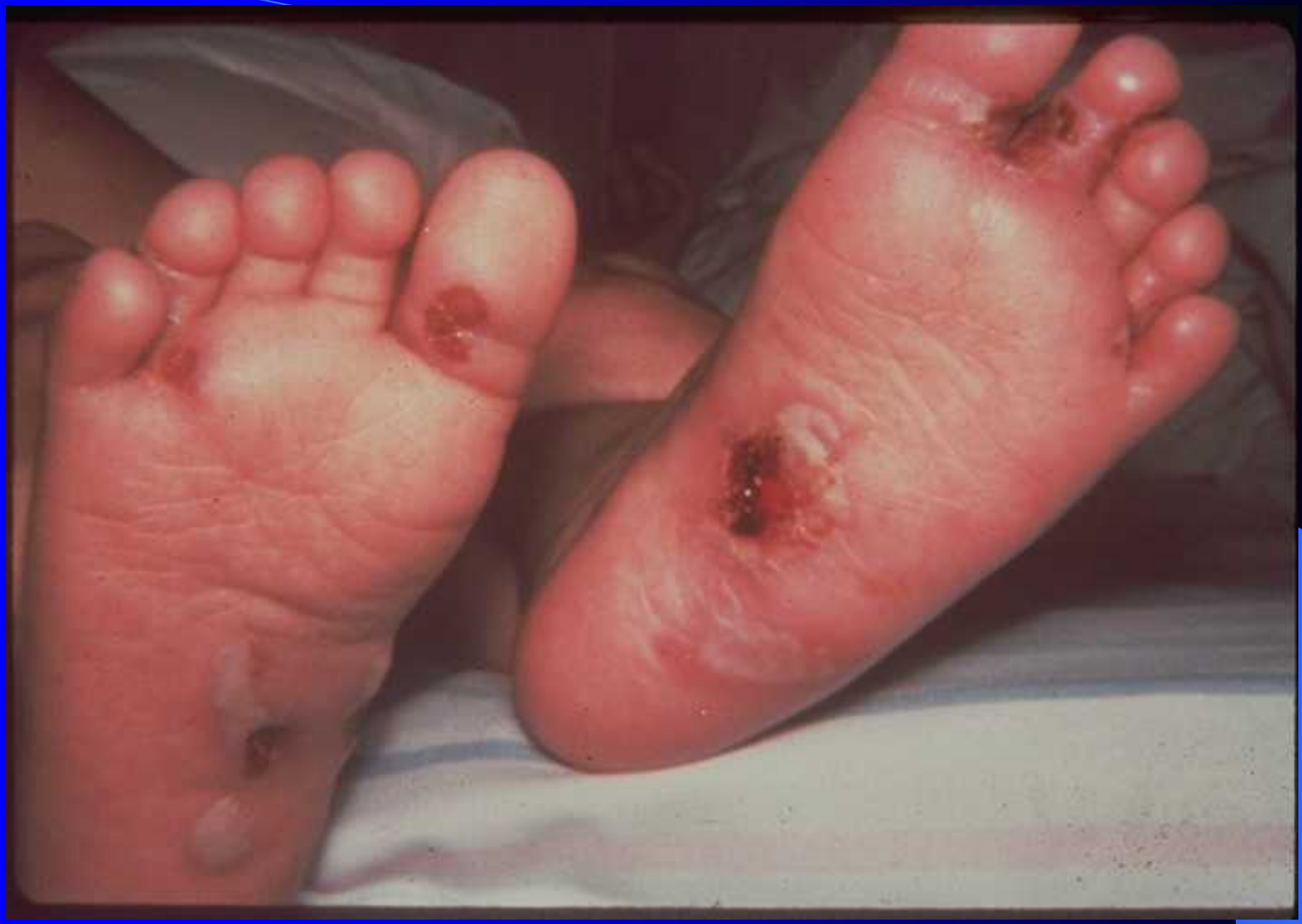
Relationship Between Water Temperature and Full Thickness Burns

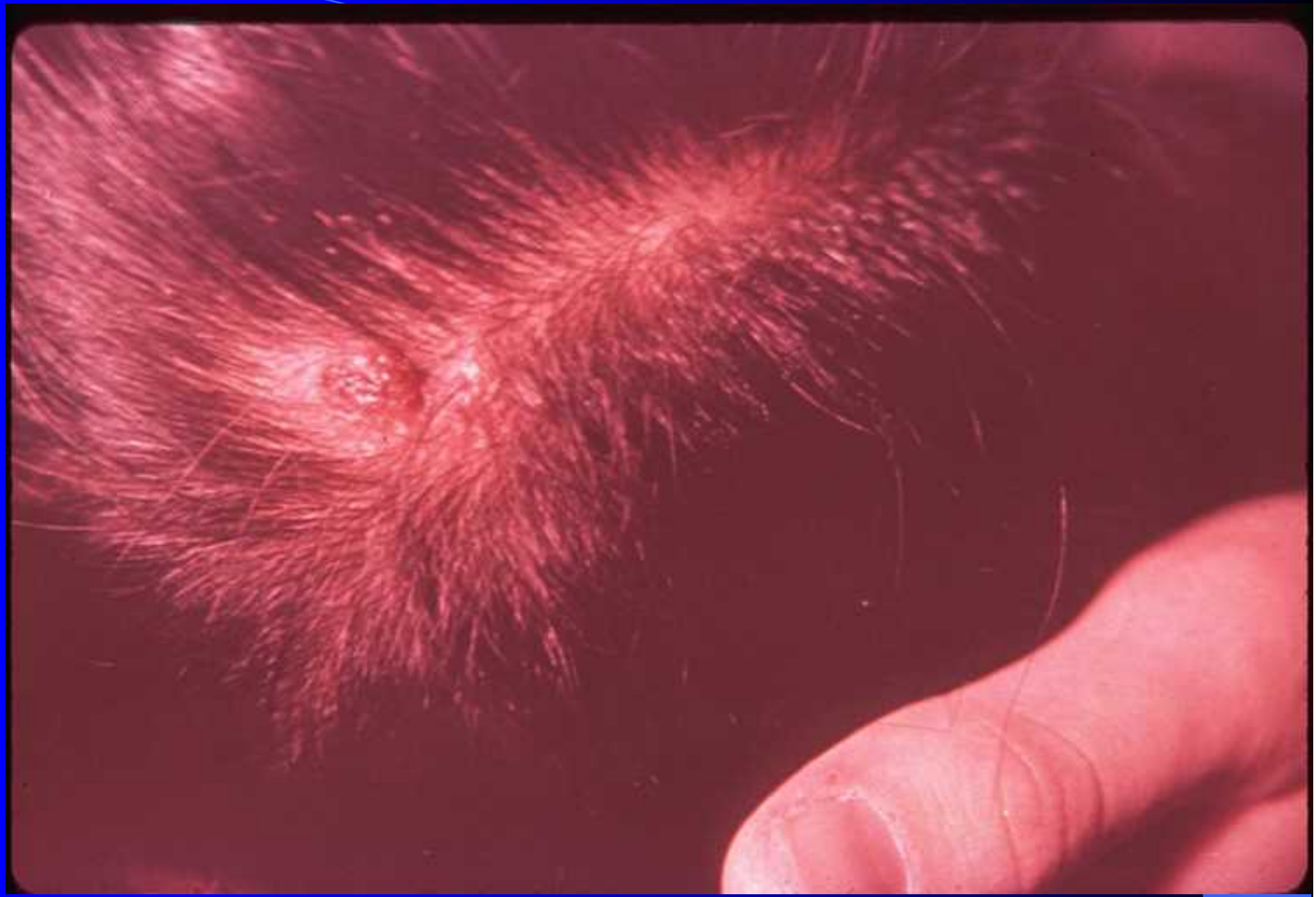


Adapted from Moritz & Henriques, 1947 Katcher, 1981; Richardson, 1994; Giardino, Christian & Giardino, 1997.









Shaken Baby Syndrome =Abusive Head Trauma

- Ambroise Tardieu a French forensic physician wrote an article in 1860 describing abusive injuries including fatal head injuries in infants.
- Whiplash Shaken Infant Syndrome
  - Coined by Caffey in 1972 in landmark article
  - Noted constellation of fractures, subdural hematomas and retinal hemorrhages as early as 1946
- Shaken Baby Syndrome
  - Shaken Impact Syndrome
- Abusive Head Trauma
  - April 27, 2009

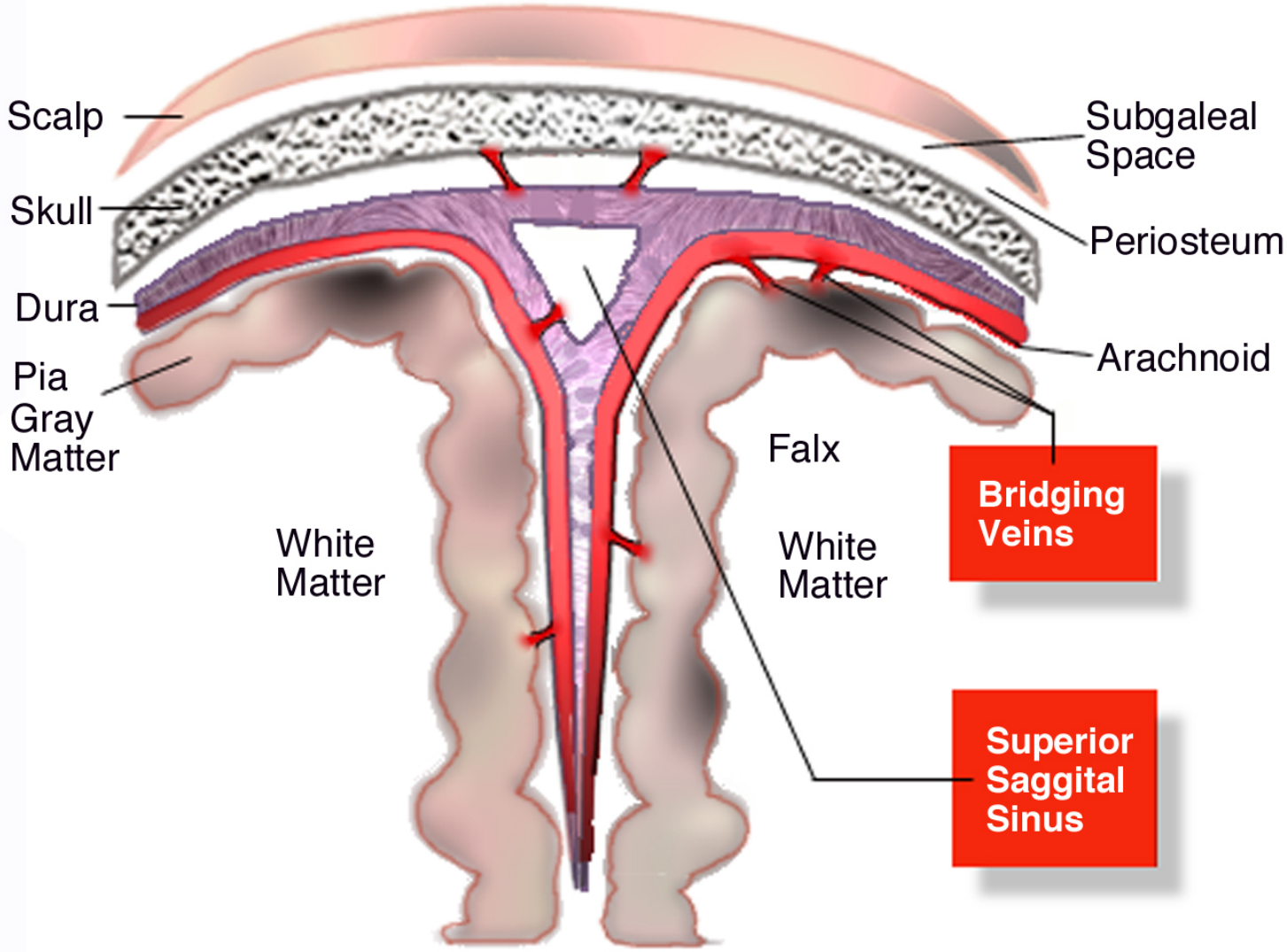
Presenting Symptoms of AHT

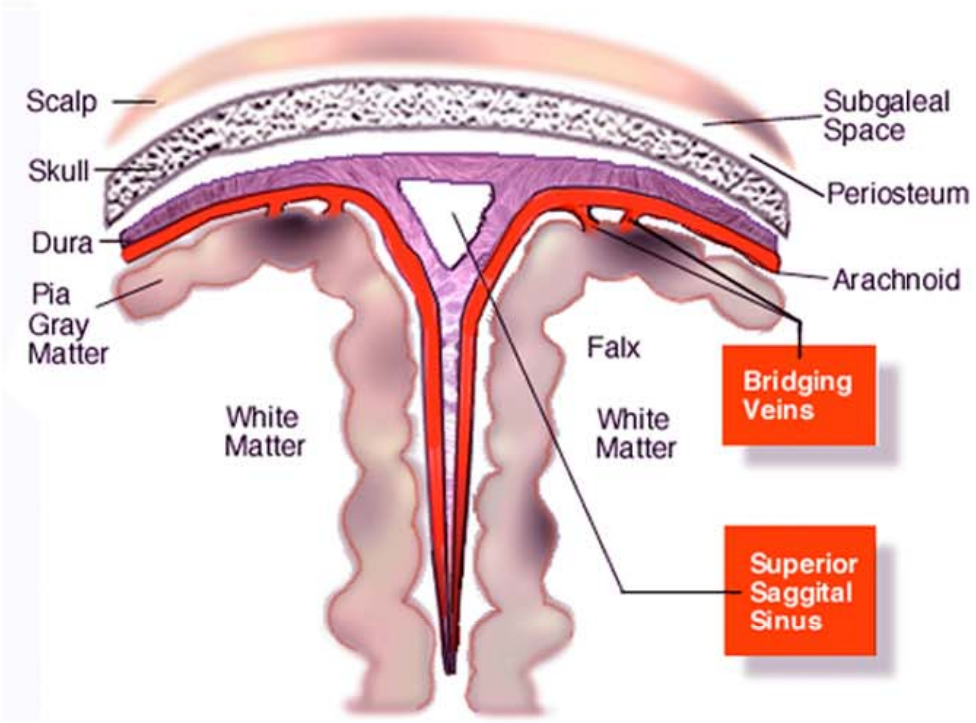
- Poor feeding
- Vomiting
- Lethargy
- Irritability
- Seizure
- Coma
- Death

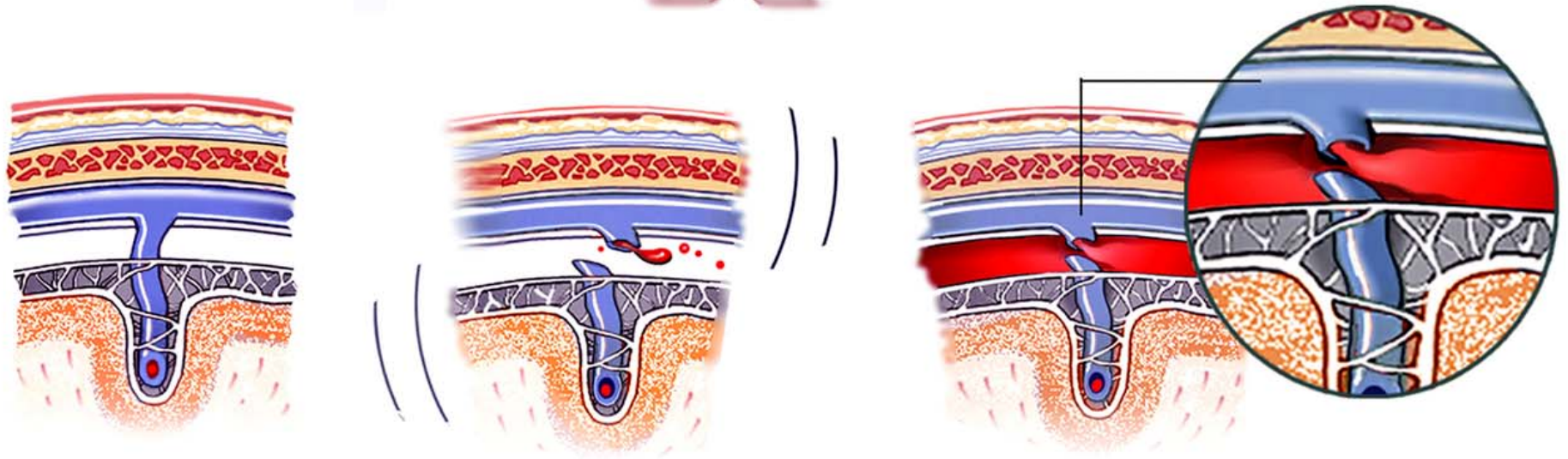
Abusive Head Trauma

- Subdural or subarachnoid hemorrhages
- Cerebral edema
- Retinal hemorrhages
- Skull fractures or scalp contusions
- Skeletal fractures
- Spinal cord injuries

Coronal view of scalp, skull, meninges and cerebrum







Age Range for AHT

- Peak incidence of crying in infants 6 weeks- 4 months
- Peak incidence of SBS 6 weeks- 4 months
- Not uncommon from 0-2 years
- Uncommon but occurs 3-5 years
- Shaken Adult Syndrome

Victims of AHT

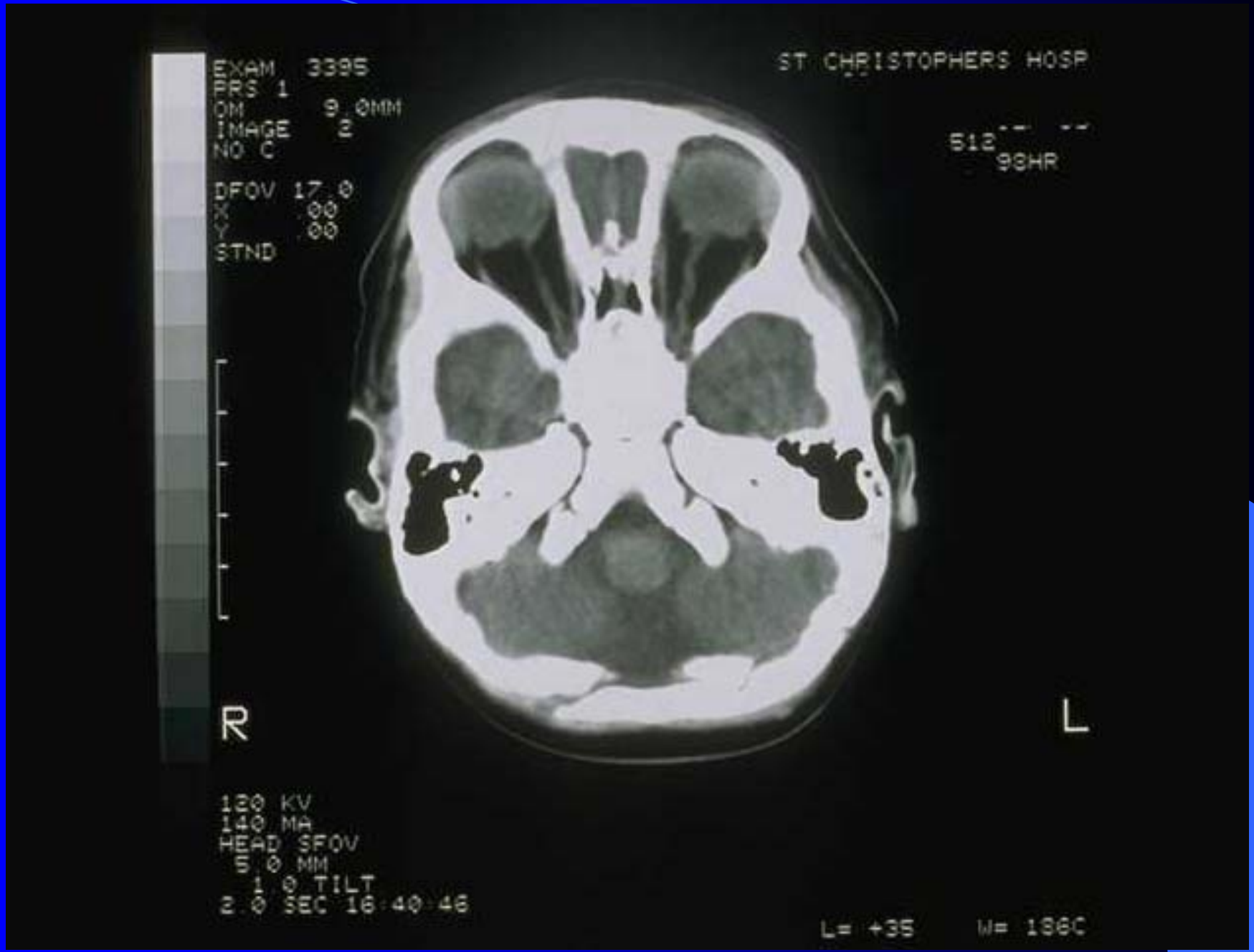
- %70 have evidence of prior abuse
- %33 have evidence of prior intracranial injury

Mortality and Morbidity of AHT

- 25% mortality rate
- Wide range of morbidity
- Unknown denominator

Evidence of External Trauma

- Bruising on the head from impact
- Bruising on the arms or chest wall from tightly gripping the baby
- External evidence is present in only fifty percent of cases
- External evidence is not predictive of outcome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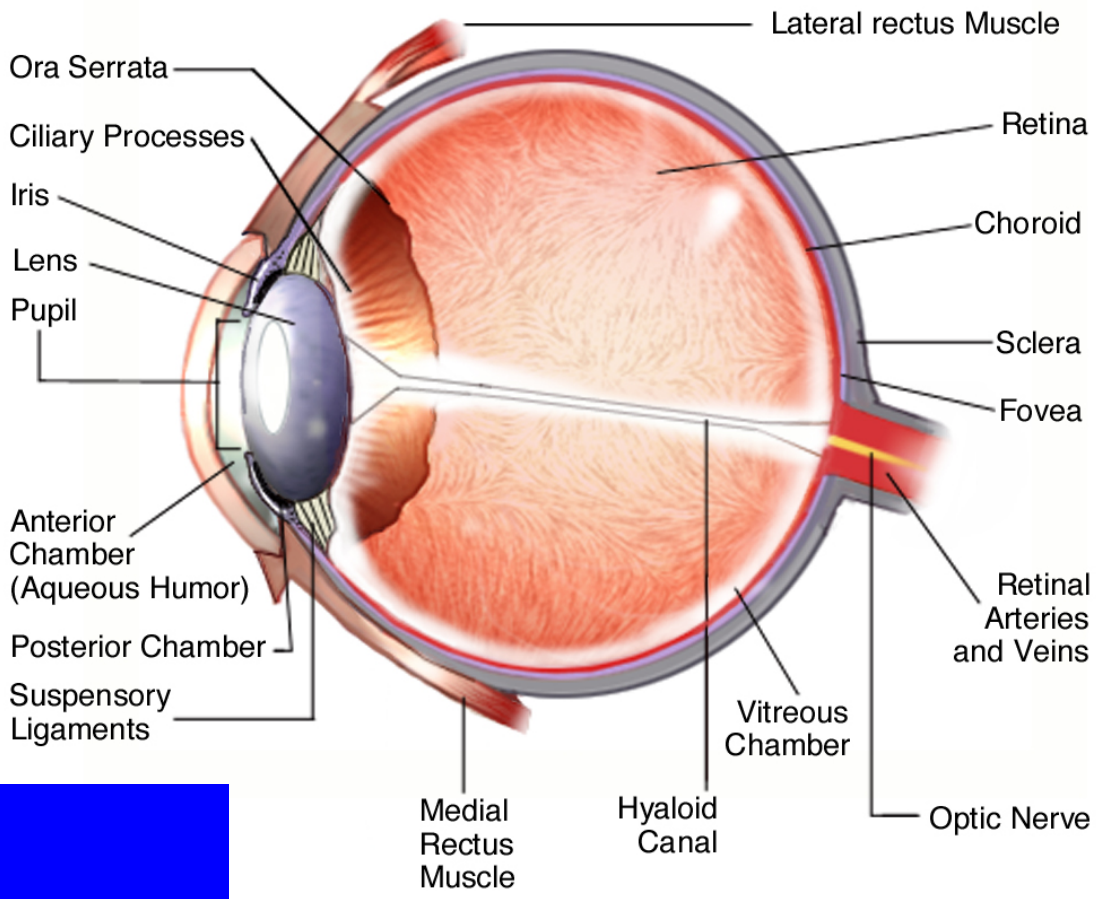
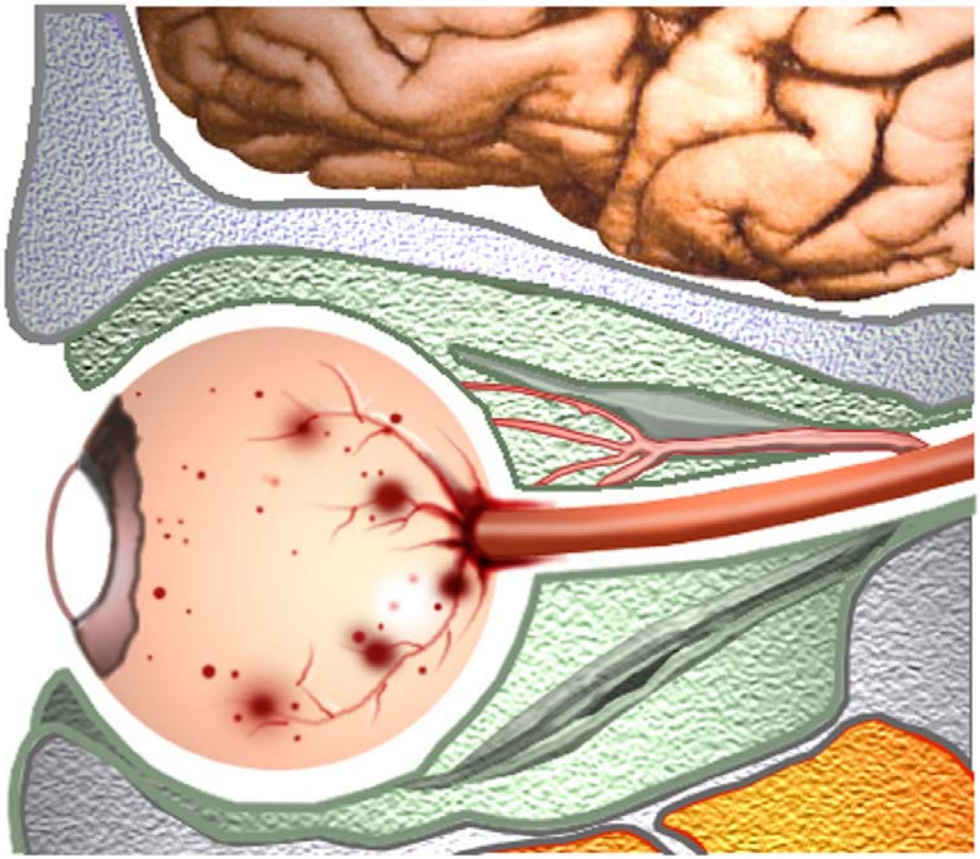
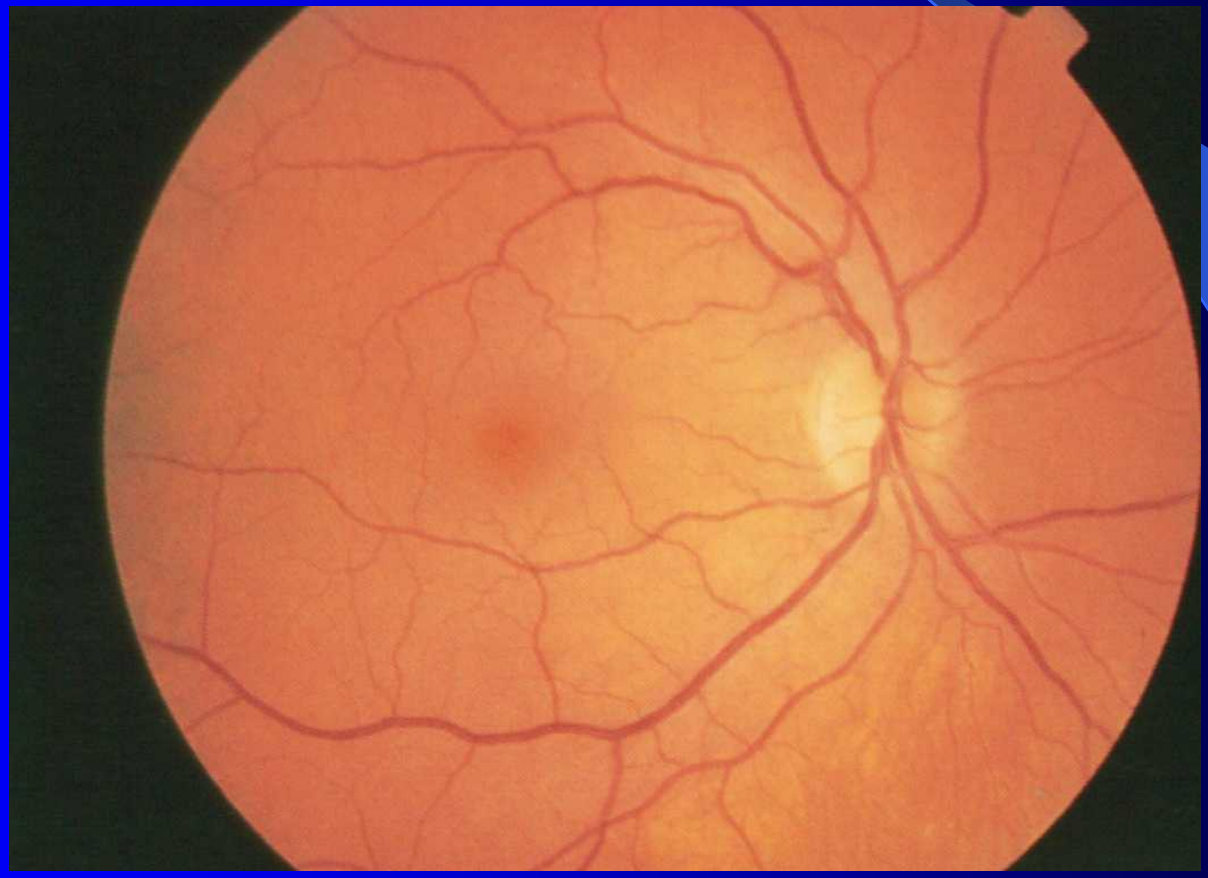
Special Senses-Sight

Cross sectional view of right eye

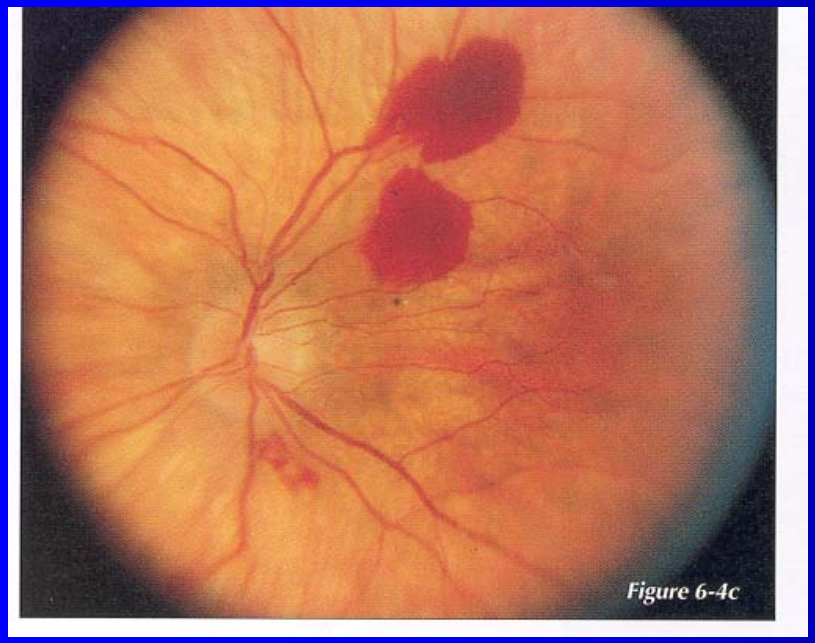


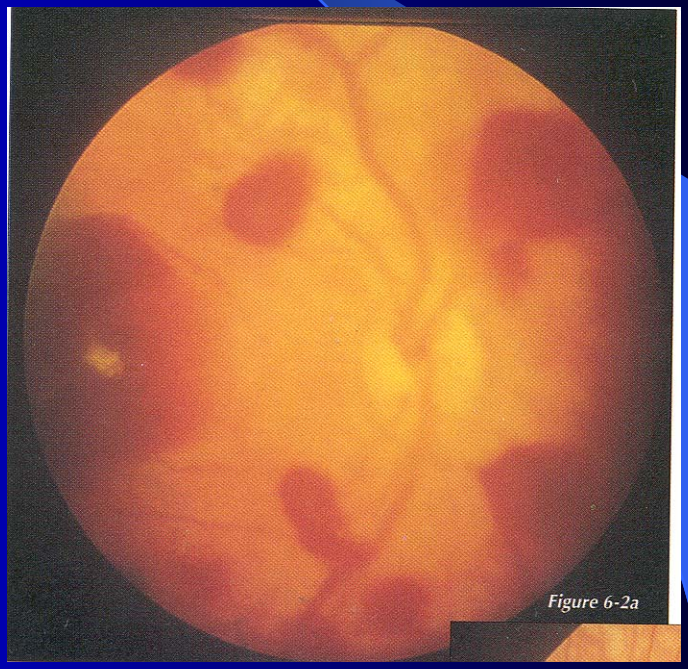


Normal Retina



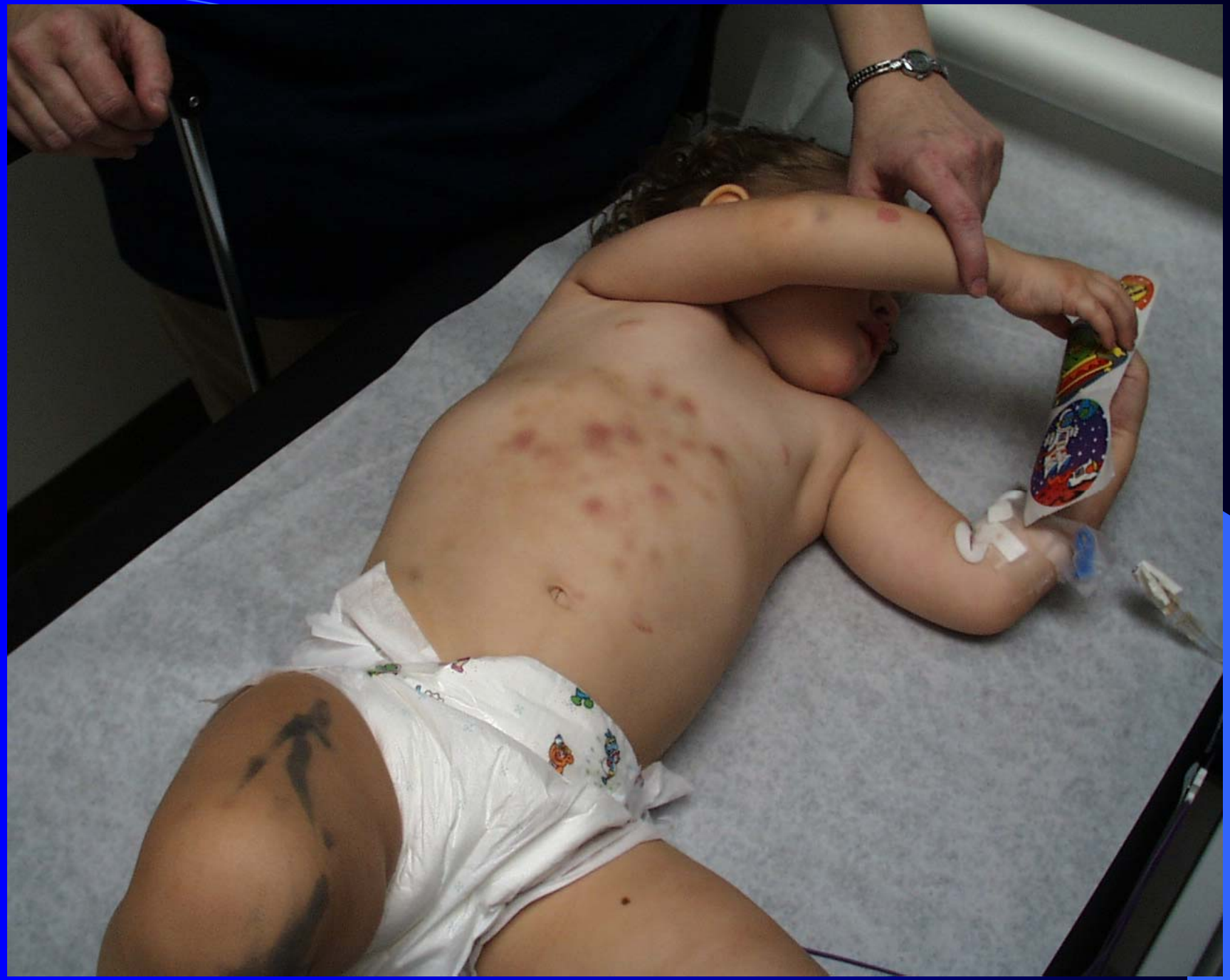
Retinal Hemorrhages

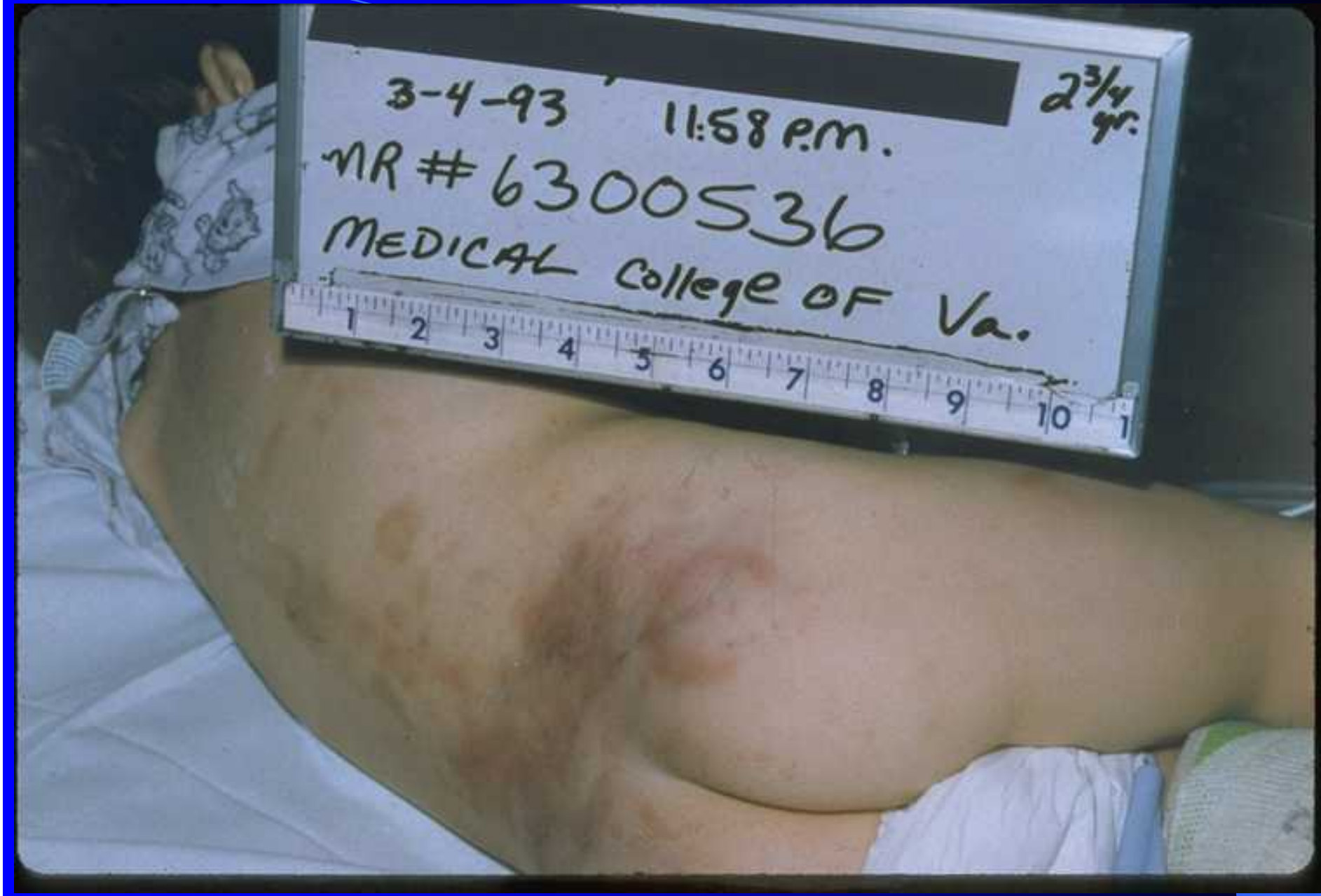




Inflicted Abdominal Injuries

- Ruptured liver or spleen
- Intestinal perforation
- Intramural hematoma of duodenum or proximal jejunum
- Ruptured blood vessel
- Pancreatic injury
- Kidney injury

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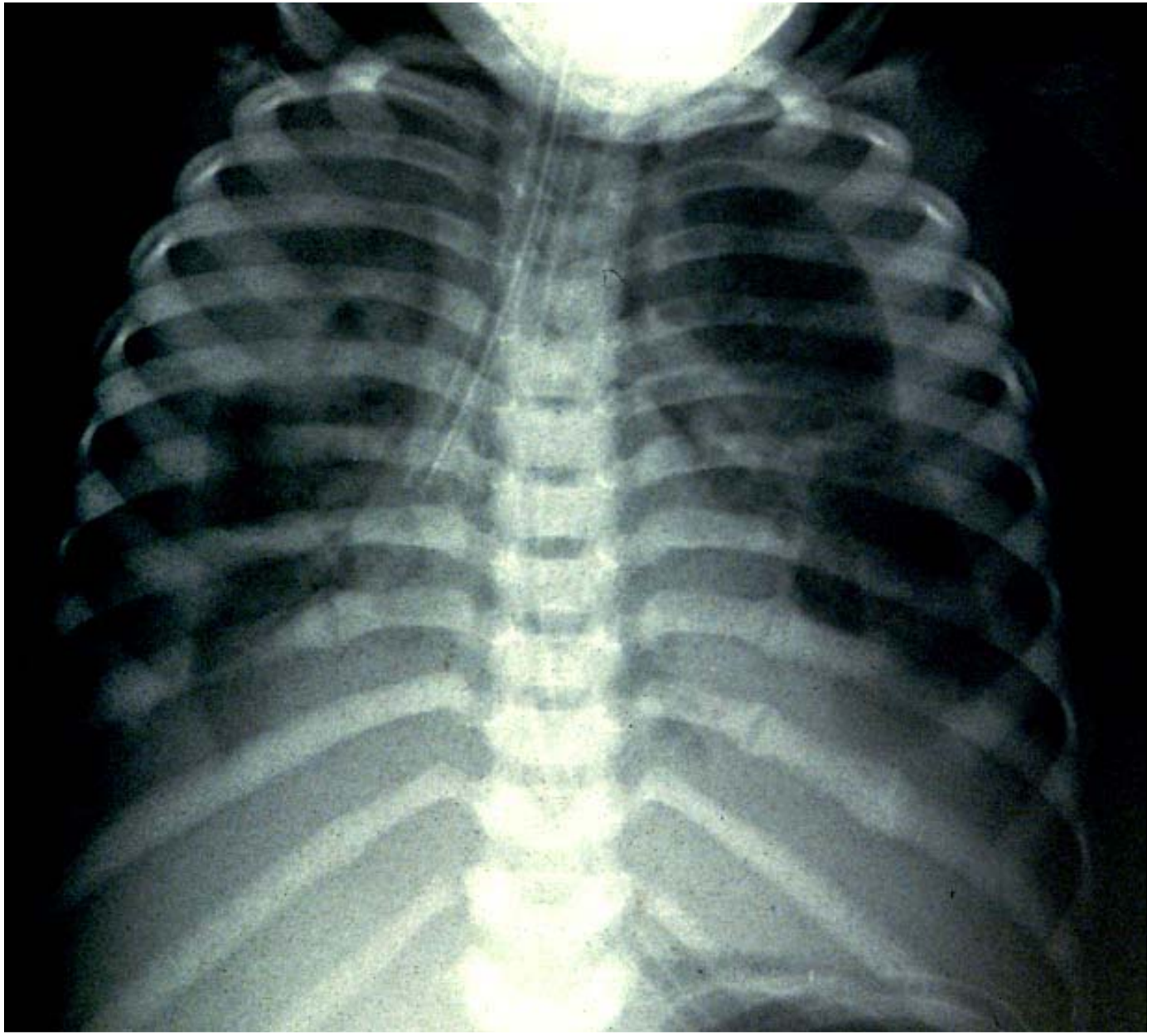
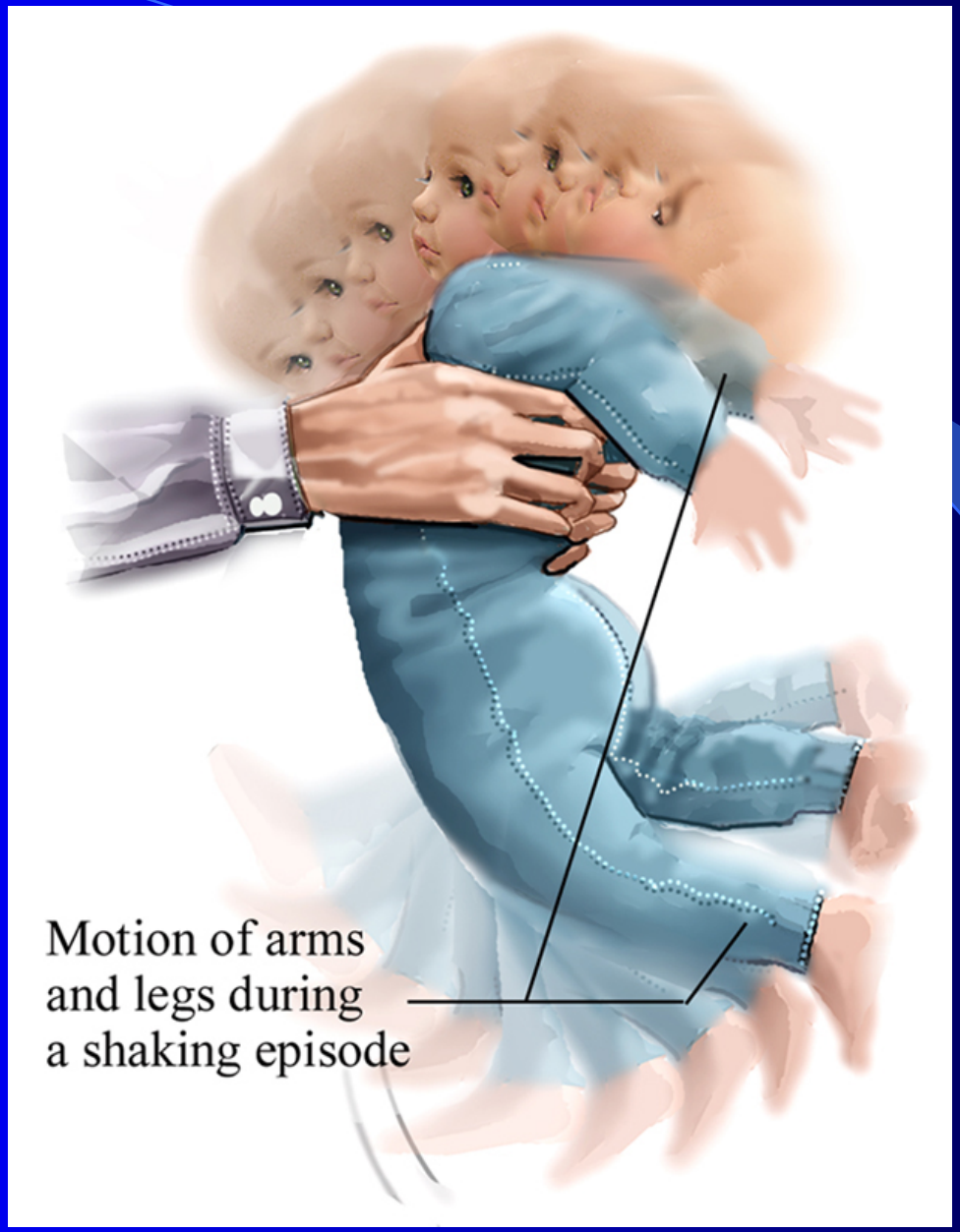
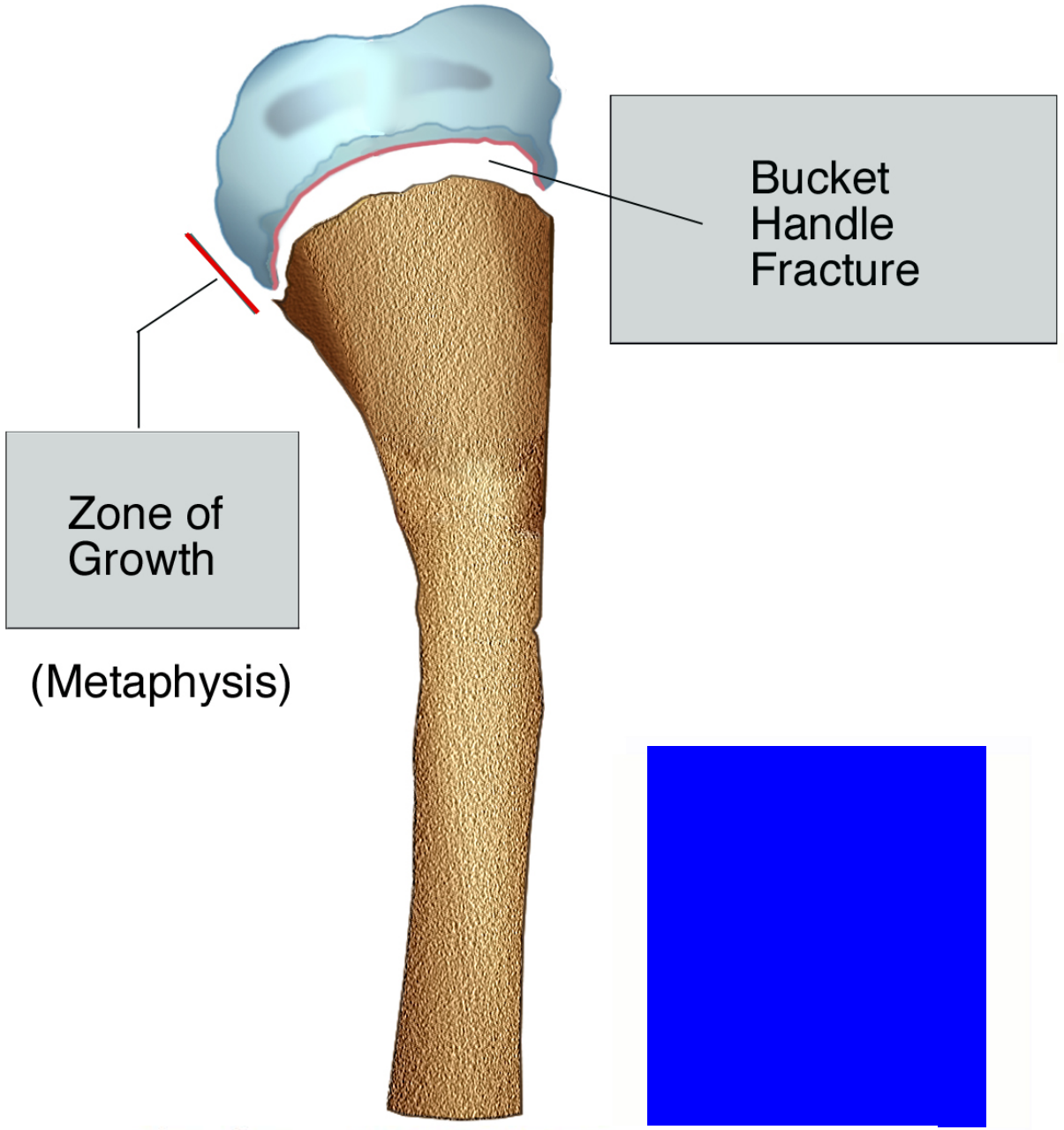
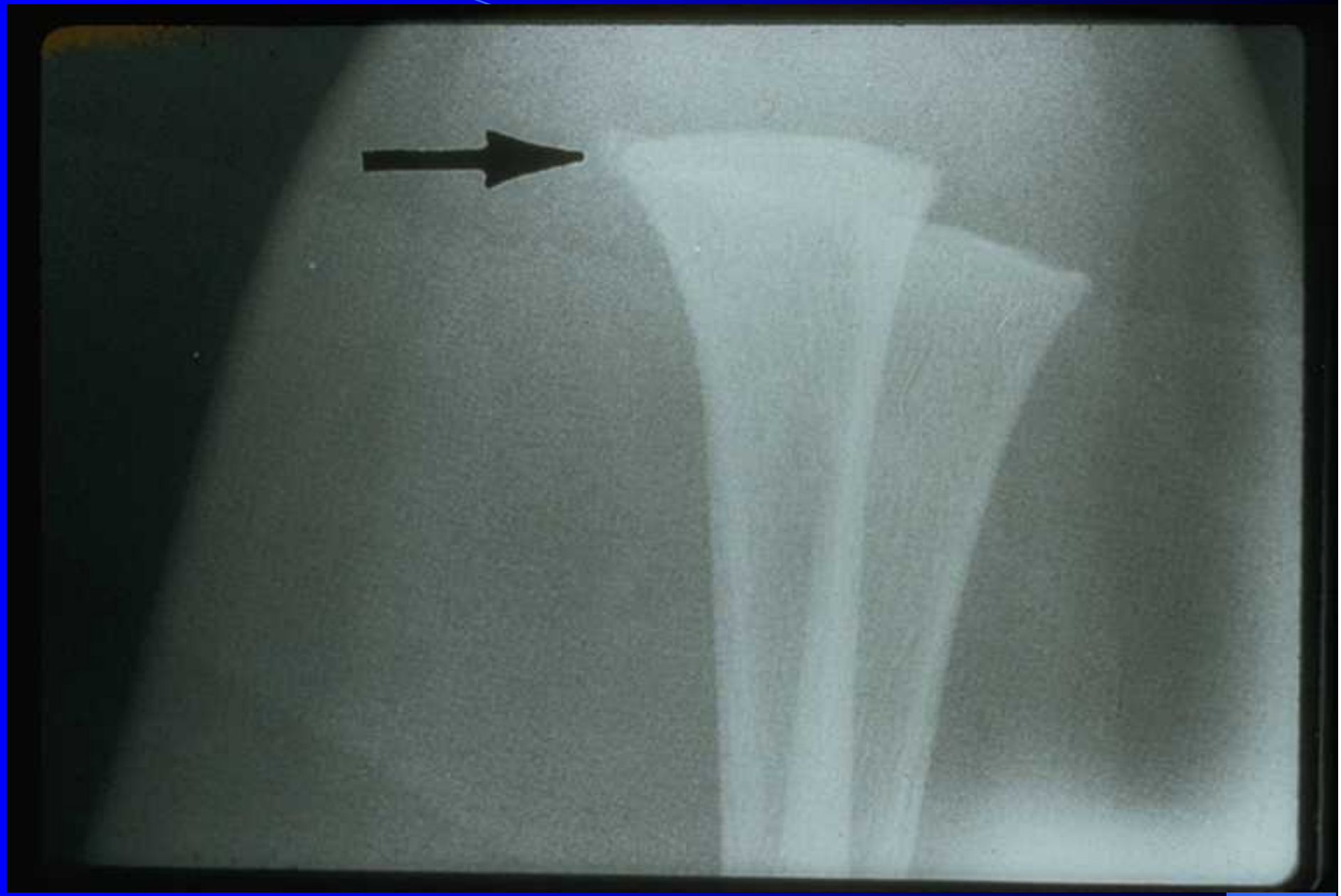
Inflicted Bone Injuries

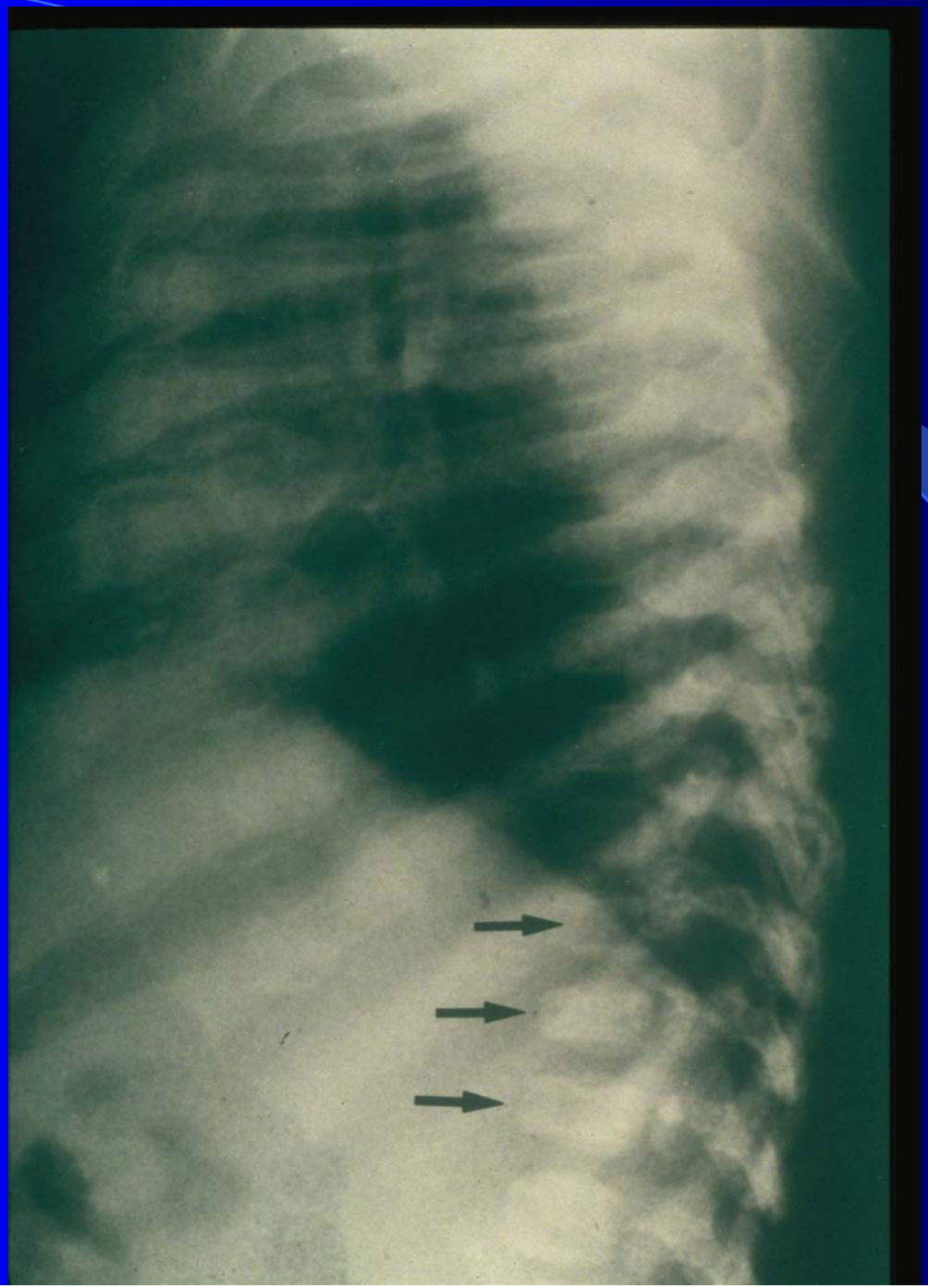
- Chip Fractures of Metaphysis
- Bucket Handle Fractures of Metaphysis
- Unusual Fractures (Ribs, Scapula, Sternum)
- Fractures at different stages of healing

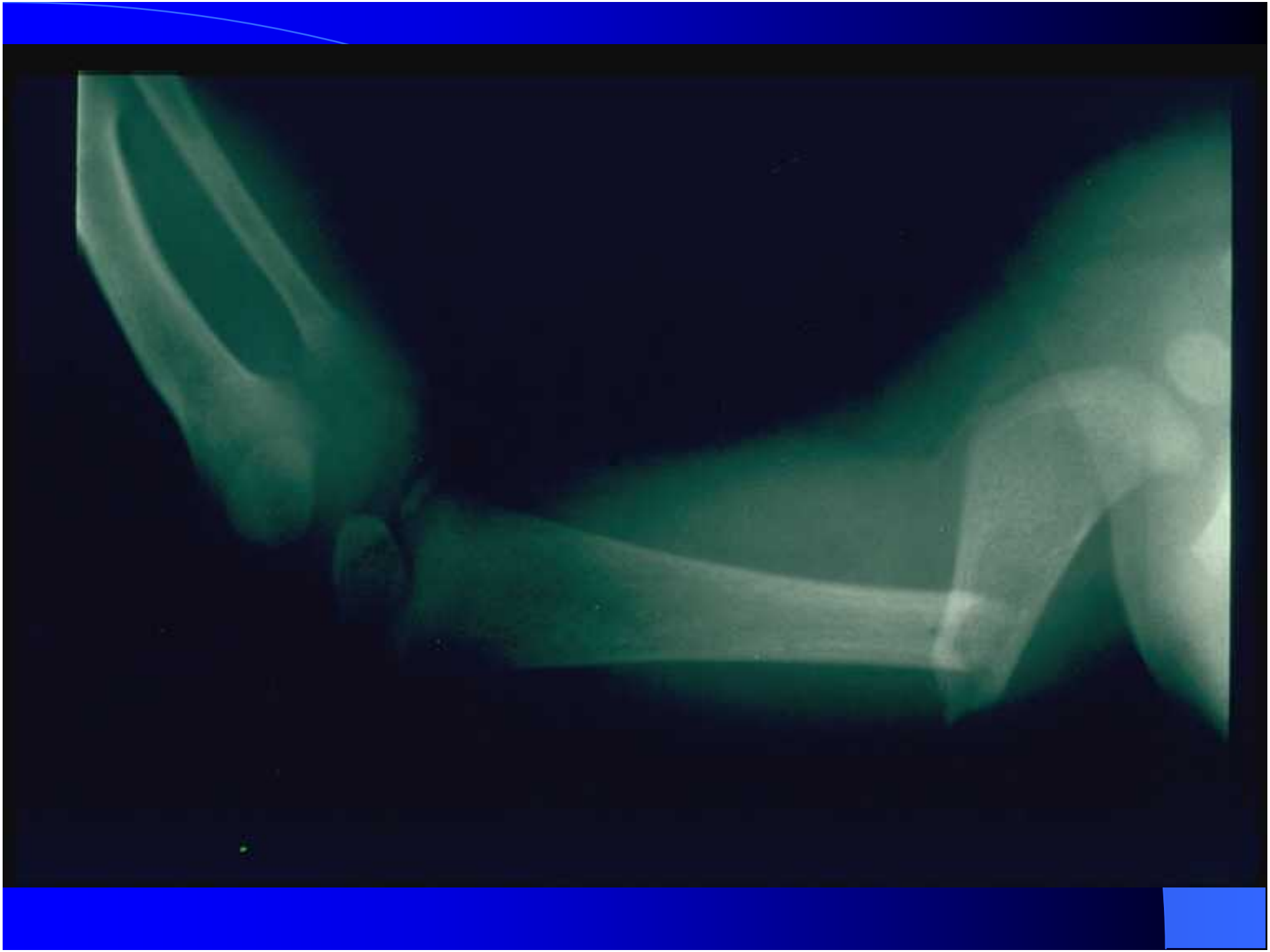












2-week-old with knot in thigh