

**East Central (4) Regional Trauma Advisory Board
REGULAR MEETING
Tuesday, May 20th, 2021 – 1:00 p.m.**

Location of Meeting: Microsoft Teams

https://teams.microsoft.com/l/meetup-join/19%3ameeting_ZDBhYzdmZWYtOGNjYS00ODQ0LTg4YjgtYTcxODgxMDQwYTM%40thread.v2/0?context=%7b%22Tid%22%3a%229a307864-3e98-4f08-b90a-728b62cf32c5%22%2c%22Oid%22%3a%22463c8334-e408-4d1d-b4eb-52f4b934efe4%22%7d

Join by Phone [+1 405-898-0717](tel:+14058980717), [865803162#](tel:+140589803162) United States, Oklahoma City
Conference ID: 865 803 162# (*6 to Mute/Unmute)

There is no physical meeting location. All Advisory Council Members are participating remotely via the Microsoft Teams platform shown above. Advisory Council Members are:

Chair / Mike Cates, Vice-Chair / Dr. James Campbell, Secretary/Treasurer / Kim Walton, Air-Evac Lifeteam – Henryetta / Sherri McKeown, Air-Evac Lifeteam – Muskogee / Mark Forrest, Bristow Medical Center / Francine Eastin, Checotah EMS / Jerry Lewis, Cherokee Nation EMS / Matthew Bonnell, Cherokee Nation W.W. Hasting Hospital / Lori Taylor, Cornerstone Hospital of Oklahoma / John Gaden, Cowete Fire Department/EMS / Brian Woodward, Drumright Regional Hospital / Susie Hinx, First Flight Tahlequah / Korey Langston, Haskell County Community Hospital / Judy Hall, Hillcrest Hospital Henryetta / Mary Fisher, Dr. James Campbell, Mannford Ambulance Service / Tiffany Caudle, Memorial Hospital of Stilwell / Alan Adams, MERC / Samuel Murray, Mercy Life Line 4 / Marshall Gattis, Muscogee (Creek) Nation Long Term Acute Care Hospitals, Muscogee (Creek) Nation Medical Center – Okmulgee / Michelle Early, Muscogee (Creek) Nation Rehabilitation / Chuck Myers, Muskogee County EMS / Laurel Havens, Northeastern Health – Sequoyah / Ozalena Martinez, Northeastern Health System / Stephanie Collins, Northeastern Health System EMS / Mike Cates, Okmulgee County EMS / Jeremy Shatswell, Pafford EMS of OK - Sequoyah County / Mike Little, Pafford EMS of OK – Stilwell / Mike Little, Saint Francis Hospital Muskogee / Stacey Jarrard, Tulsa Life Flight – Pryor Sub-Station / Johnny Dobson, Wagoner Community Hospital / Jim Roberts, Wagoner EMS / Jim Roberts

AGENDA

- I. Call to Order.....Mike Cates, Chair
- II. Roll Call.....Kim Walton, Secretary/Treasurer
- III. Introductions and Announcements.....Mike Cates, Chair
- IV. Approval of Minutes (11-20-2020)Mike Cates, Chair
- V. Reports
 - A. Emergency Systems quarterly activity report.....Lori Strider, EMS Administrator
 - B. Regional Planning Committee quarterly activity reportMark Forrest, Committee Chair
 - C. Quality Improvement Committee quarterly activity reportDr. James Campbell, Committee Chair
 - D. Regional Medical Response System quarterly activity reportHenrietta Dreadfulwater
 - E. EMS for Children quarterly activity reportDelores Welch
- VI. Business
 - A. Discussion, consideration, possible action and vote to approve recommendation to the RTAB chair for possible licensure action pending review of RTAB member attendance.....Mike Cates, Chair



- B. Discussion, consideration, possible action and vote to approve amendments to the Region 4 Trauma plan pending review of the approved Letter Schedule of Escalation and placement within the Region 4 Trauma Plan.....Mike Cates, Chair
- C. Discussion, consideration, and vote to approve Tricia Fleming to the RPC committee.....Mike Cates, Chair

- VII. Presentation
 - A. Non-Accidental Trauma.....Dr. Larissa Hines

- VIII. New Business (For matters not reasonably anticipated 48 hours prior to the meeting as usual)

- IX. Public Comment
 - *If attending through the Teams website, please raise a virtual hand for your name to be included in the public comments queue.*
 - *Comments will be received with people who raised a virtual hand through Teams, followed by those who are attending by phone conference. The comment order will be alphabetically (a-z) based on the attendee's last name.*
 - *To ensure that everyone who desires to make a public comment has had the opportunity to speak, after comments have been made by attendees who raised a virtual hand in Teams or identified themselves when the beginning letter of their last name was called for phone conference attendees, we will then make one last final call for attendees to identify themselves who want to make a public comment, but have not done so.*

- X. Next Meeting
 - A. Continuous Quality Improvement
 July 20th, 2021 – 10:00 am

 - B. East Central (4) Regional Planning Committee
 August 19th, 2021 – 10:00 am

 - C. Northeast (2) Regional Trauma Advisory Board
 August 19th, 2021 – 1:00 pm

 - D. OTERAC
 June 2nd, 2021 – 1:00 pm

- XI. Closing, Adjournment, and Dismissal.

**If the audio is disconnected at any point during the meeting, Board Members will attempt to rejoin. The meeting will reconvene upon reconnection using the same platform and access codes. If unable to restore connections for a maximum of 15 minutes the meeting will be adjourned.*



East Central (4) Regional Trauma Advisory Board

https://teams.microsoft.com/l/meetup-join/19%3ameeting_ZmlyNTVkJmZyNmNlOS00ZTJjLWl4MTgtYmJiZmI5NWZiNzQy%40thread.v2/0?context=%7b%22Tid%22%3a%229a307864-3e98-4f08-b90a-728b62cf32c5%22%2c%22Oid%22%3a%22463c8334-e408-4d1d-b4eb-52f4b934efe4%22%7d

Optional Ways to Join

+1 405-898-0717 United States, Oklahoma City (Toll)
Conference ID: 933 396 02#
November 12th, 2020 @ 1:00 pm

DRAT MINUTES

I. Call to Order

The meeting was called to order by Chairperson Laurel Haven at 1:15 pm.

II. Welcome and Introductions

None at this time

III. Roll Call

Roll call was taken with quorum of Board members met. See attached sheet for complete attendance.

IV. Approval of Minutes –August 20th, 2020

A motion to approve the minutes with changes was made by Sophia Abdo and seconded by Mike Cates. There was no discussion and the motion passed after a unanimous roll call.

V. Reports/Updates

A. Emergency Systems quarterly activity report – Lori Strider

Lori Strider introduced Katrina Warden as the new Special Projects Coordinator and noted that staff will be moving to the new Oklahoma Commons Building soon. Linda Dockery is the point of contact for Trauma Fund and the new application deadlines handout was not included in the member packet, but will be emailed to members when available. The final list for the data dictionary is completed and was presented at the July 15th Oklahoma State Stroke System Advisory Council meeting. New EMS Rules were signed and went into effect September 11th, 2020. The updated rules are available on the Emergency Systems website. EMS agencies needing a new unit inspection should use the following link to schedule their inspection: https://osdhphs.co1.qualtrics.com/jfe/form/SV_cCIJ6SDD4koTxLT Oklahoma EMS Information System (OKEMISIS). Xana Howard is the point of contact and there are no trainings scheduled for OKEMISIS. Dr. Yang Wan is the point of contact for the Trauma Registry and there is no training scheduled at this time. EMS Director training is now being conducted virtually; upcoming trainings will be announced as scheduled for early 2021. Oklahoma Trauma Education Program has no classes scheduled at this time. If your agency is in need of an OTEP class contact our department and we can try to schedule one virtually. The Trauma Transfer and Referral Center is up and running. Oklahoma Trauma and Emergency Response Advisory Council met October 7th, 2020 – 1:00pm.

B. Regional Planning Committee quarterly activity report – Mark Forrest

None at this time.



- C. Quality Improvement Committee quarterly activity report – Dr. James Campbell
The committee reviewed a total of ten cases and with the follow-up on 16 letters of which 8 were good job letters. The committee reviewed the responses of 24 previously sent letters to facilities and agencies. The committee approved verbiage to be placed into the Region 2 Trauma Plan and will be sent to the RTAB for consideration. There will be a Statewide QIC meeting on December 8th, 2020.
- D. Regional Medical Response System quarterly activity report – Henrietta Dreadfulwater
Sam Murray stated MERC is combined with Region 5 now. He is the contact person for Region 4. He urged all agencies to keep EMResource updated. The next RMPG meeting is November 18th, 2020 at 1:00 pm.
- E. EMS for Children quarterly activity report – Delores Welch
Was not present.

VI. Business:

- A. Discussion, consideration, possible action, and vote to approve the Combined Region 2/4/7 CQI Committee’s Letter Schedule of Escalation Proposal – Brandee Keele
- B. Discussion, consideration, possible action, and vote to approve the CQI Committee recommendation that the RTAB and QI Committee Chairs draft and send a letter to licensed hospitals and ambulances services regarding the continuous quality improvement process – Brandee Keele
A motion to approve item A and B was made by Mike Cates and seconded by Jim Roberts. There was no discussion and the motion was passed after unanimous roll call vote.
- C. 2021 Board Rotation Discussion and vote to approve – Laurel Havens
- D. 2021 Committee Membership Discussion and vote to approve – Laurel Havens
- E. 2021 Board Officer Discussion and vote to approve – Laurel Havens
 - 1. Chair – Mike Cates
 - 2. Vice-Chair – Dr. James Campbell
 - 3. Secretary/Treasurer - Kim WaltonA motion to approve item C, D, and E was made by Mark Forrest and seconded by Dr. James Campbell. There was no discussion and the motion was passed after unanimous roll call vote.
- F. 2021 Board Meeting Dates, Times, and Venue Discussion and vote to approve – Laurel Havens
 - 1. February 18th, 2021 at Saint Francis Hospital Muskogee at 1:00 pm
 - 2. May 20th, 2021 at Saint Francis Hospital Muskogee at 1:00 pm
 - 3. August 19th, 2021 at Saint Francis Hospital Muskogee at 1:00 pm
 - 4. November 18th, 2021 at Saint Francis Hospital Muskogee at 1:00 pmA motion to approve item F with the possibility of venue change was made by Dr. James Campbell and seconded by Andrea Dawson. There was no discussion and the motion was passed after unanimous roll call vote.

VII. New Business (for matters not reasonably anticipated 48 hours prior to the meeting)

Laurel Havens stated they received a letter from the State Auditors requesting an opinion in regards to Open Meetings Act to continue virtual meetings. He understands EMS have taken a hit with the COVID and urges everyone to follow CDC guidelines. RMRS had a discussion about helping facility that will help open up bed availability. RMRS will present the plan on 11-16-20. There has been a longer trip for transfers due to hospitals being full. He also informed the committee he will no longer be coming to the meetings. Another representative will come for Muskogee County EMS.



VIII. Next Meeting

- A. **Oklahoma Trauma and Emergency Response Advisory Council**
February 3rd, 2021 – 1:00 pm
Oklahoma State Department of Health
Address to be determined
- B. **Quality Improvement Committee**
January 19th, 2021 – 10:00 am
St John Medical Health Plaza
1819 East 19th Street
Tulsa, Ok 74104
- C. **Regional Planning Committee**
- D. **Regional Trauma Advisory Board**

IX. Adjournment

A motion to adjourn was made by Andrea Dawson and seconded by Dr. James Campbell. The meeting adjourned at 1:59 pm.

Child Abuse Recognition

Larissa Hines, MD
Child Abuse Pediatrician and Fostering Hope Pediatrician
Oklahoma Children's Hospital at OU Health
Clinical Assistant Professor
University of Oklahoma Health Sciences Center at OU Health

1

What is Child Abuse?

The Federal Child Abuse Prevention and Treatment Act (CAPTA), (42 U.S.C.A. §5106g), as amended and reauthorized by the CAPTA Reauthorization Act of 2010, defines child abuse and neglect as, at minimum:

“Any recent act or failure to act on the part of a parent or caretaker which results in death, serious physical or emotional harm, sexual abuse or exploitation; or an act or failure to act which presents an imminent risk of serious harm.”

<https://www.childwelfare.gov>

2

Physical Abuse

- Nonaccidental physical injury (ranging from minor bruises to severe fractures or death) that is inflicted by a parent, caregiver, or other person who has responsibility for the child.
- Such injury is considered abuse regardless of whether the caregiver intended to hurt the child.
- Physical discipline, such as spanking or paddling, is not considered abuse as long as it is reasonable and causes no bodily injury to the child.

<https://www.childwelfare.gov>

3

Neglect

- Failure of a parent, guardian, or other caregiver to provide for a child's basic needs
- Physical (e.g., failure to provide necessary food or shelter, or lack of appropriate supervision)
- Medical (e.g., failure to provide necessary medical or mental health treatment)
- Educational (e.g., failure to educate a child or attend to special education needs)
- Emotional (e.g., inattention to a child's emotional needs, failure to provide psychological care, or permitting the child to use alcohol or other drugs)

<https://www.childwelfare.gov>

4

Sexual Abuse

- Activities by a parent or caregiver such as fondling a child's genitals, penetration, incest, rape, sodomy, indecent exposure, and exploitation through prostitution or the production of pornographic materials

<https://www.childwelfare.gov>

5

Emotional Abuse

- Pattern of behavior that impairs a child's emotional development or sense of self-worth
- May include constant criticism, threats, or rejection, as well as withholding love, support, or guidance
- Often difficult to prove, and therefore, child protective services may not be able to intervene without evidence of harm or mental injury to the child
- Almost always present when other types of maltreatment are identified

<https://www.childwelfare.gov>

6

Abandonment

- A child is considered to be abandoned when the parent's identity or whereabouts are unknown, the child has been left alone in circumstances where the child suffers serious harm, or the parent has failed to maintain contact with the child or provide reasonable support for a specified period of time

<https://www.childwelfare.gov>

7

Substance Abuse

- Prenatal exposure of a child to harm due to the mother's use of an illegal drug or other substance
- Manufacture of methamphetamine in the presence of a child
- Selling, distributing, or giving illegal drugs or alcohol to a child
- Use of a controlled substance by a caregiver that impairs the caregiver's ability to adequately care for the child

<https://www.childwelfare.gov>

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Epidemiology

- 3.6 million referrals alleging maltreatment to CPS involving 6.6 million children
- 702,000 victims of maltreatment
- 1,580 fatalities
- 9.4 child victims per 1,000 children
- The youngest children are the most vulnerable to death from maltreatment

NCANDS. Child Maltreatment 2014.

9

Epidemiology

- Neglect is the most common at 75% of cases
- Physical abuse is the second most common
- 17% of cases are physical abuse
- 119,517 victims of physical abuse

NCANDS. Child Maltreatment 2014.

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Under Reporting

- The estimated number of victims is actually much higher
- Physical abuse remains under reported (and often under detected)
 - Individual and community variations in what is considered "abuse"
 - Inadequate knowledge and training among professionals in the recognition of abusive injuries
 - Unwillingness to report suspected abuse
 - Professional bias

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Duty to Report Child Abuse and Neglect

All professionals in the state of Oklahoma have a duty to report any reasonable suspicion of child maltreatment.

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Physical Abuse

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Clinical Approach

- Stabilize and resuscitate
- Careful and well documented history is the most critical element of the medical evaluation
 - Using quotes whenever possible
 - Description of the mechanism of injury or injuries
 - Onset and progression of symptoms
 - Child's developmental capabilities

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Physical Examination

- Detailed documentation
 - Photographs
 - Body diagrams
- Specific attention to
 - All areas of skin
 - External ears
 - Conjunctiva
 - Frenula

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Cutaneous Findings

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Sentinel Injuries

- Minor injuries, such as a bruise or intraoral injury
- Premobile infant
- Visible or detectable to a caregiver
- Poorly explained and unexpected

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Sentinel Injuries

- 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
- 42% 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

Sheets. Pediatrics 2013;131:701-7.

18



19

Bruises

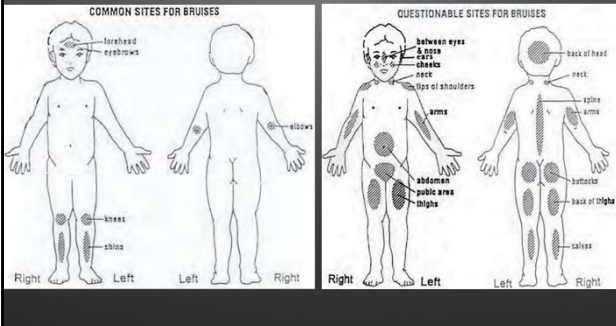
20

If you don't cruise, you don't bruise

- Bruising in infants who don't pull to a stand or walk are rare
- Bruising increases exponentially once an infant begins to cruise
- Bruising is generally found over bony prominences

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Location



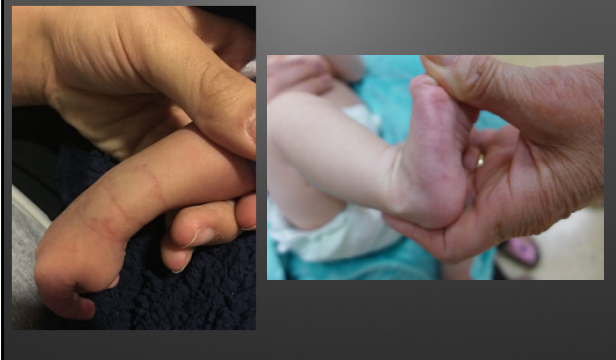
22

Patterned Bruising



23

Squeeze Marks



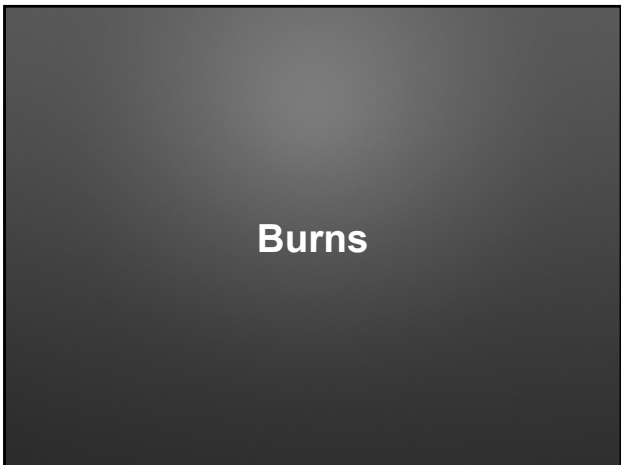
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26



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Epidemiology

- Abusive burns account for 11-25% of burns in hospitalized children
- Infants and toddler represent the greatest percentage of cases
- Typically occur in children younger than 6 years
- Mean age of injury between 2-3 years

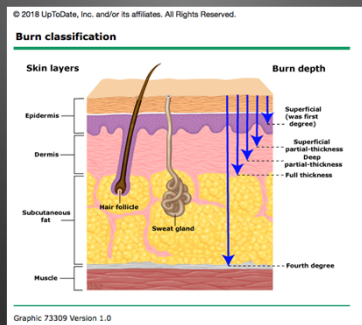
28

Burn Classification

- Superficial - Epidermal layer only 1st degree
- Superficial Partial Thickness - Epidermis and superficial dermis 2nd degree
- Deep Partial Thickness - Epidermis and deep dermis 3rd degree
- Full Thickness - Epidermis, entire dermis and into underlying subcutaneous tissue 4th degree
- Extension to Deep Tissues - Through skin and underlying soft tissues, can involve muscle or bone

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Burn Classification



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Patterns of Injury Concerning for Abuse

- Large surface area of burn
- Uniform degree of burn injury
- Full-thickness burn
- Presence of delineated burn margins
- Symmetrical burns
- Absence of burn in areas of skin flexion
- Sparing of skin with surrounding burn secondary to contact with cooler surfaces
- Scald injury without splash/drip marks

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Temperature of Water

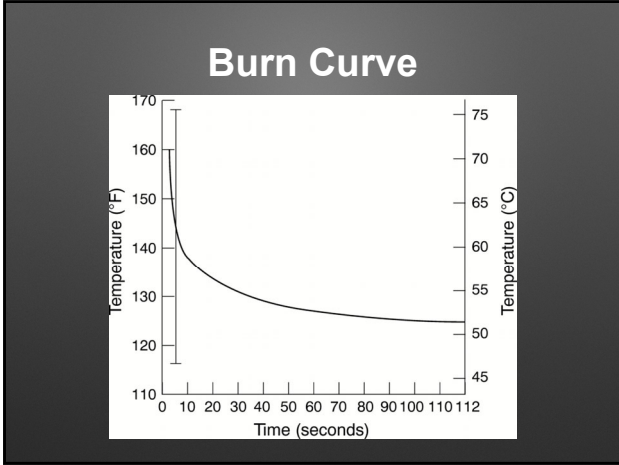
- Children bathe comfortably at 101 degrees
- Hot tubs are generally set at 102-104 degrees
- Adults sense water as painful at 112-114 degrees
- Recommended water heater setting is 120 degrees

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Temperature of Water

- At 120 degrees it would take 10 minutes to produce a deep partial thickness burn
- At 130 degrees there is a difference between children and adult skin burn times
- Above 130 degrees, children burn in 1/4 the time of adults
- Hot water splash burns require 140 degrees to produce tissue injury

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Immersion Burns

- Burn patterns:
 - Uniformity of burn depth
 - Flexion sparing
 - Linear contour between burned and unburned skin
 - Absence of splash marks
 - Bilateral burn symmetry
 - Skin sparing in areas where the skin was in contact with cooler surfaces (doughnut)

35



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Flowing Liquid

- Can be altered by clothing
- Triangular (V) shaped pattern (flow pattern)
- Type of liquid can significantly affect the burn
 - Liquids with greater boiling point (higher heat source) and viscosity (prolonged contact with skin) can result in deeper more significant burns

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Flowing Liquid



38

Flowing Liquid



39

Splash/Splatter Burns

- Require a minimum temperature of 140 degrees to produce tissue injury
- Lower temperatures will cool to a point where thermal cutaneous injury will not occur

40

Splash Burns



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Heated Solid Objects

- Due to prolonged contact with hot solid
- Abusive:
 - Distinct margins
 - Grouped burn lesions
 - Clearly inscribed patterns
- Injuries on parts of the body normally covered by clothing

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Nomenclature

- In 2009, the AAP recommended adoption of a less mechanistic term, "abusive head trauma", to describe the constellation of cerebral, spinal and cranial injuries that result from inflicted head injury to infants and young children
- The term shaken baby syndrome is still used in education and prevention efforts

Pediatrics. 2009;123(5):1409-11

46

Definition

- AHT is defined as inflicted injury to the head of an infant or young child
- Mechanisms include crush head injury, shaking, shaking with impact, impact alone, or strangulation

Kleinman, P. Diagnostic imaging of child abuse. 3rd ed.

47

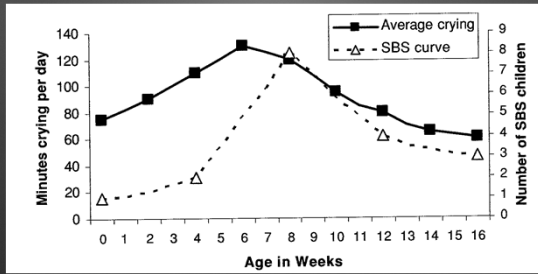
Epidemiology

- 14 to 30 per 100,000 cases of AHT in infants < 1 year of age
- Peak hospitalization rates for AHT occur at 2-4 months of age
- Peak rates of AHT fatalities in the first 2 months of life
- The leading cause of death in child abuse victims under 4 years of age

Kleinman, P. Diagnostic imaging of child abuse. 3rd ed.
Parks, S. Inj Prev. 2012;18(6):392-8

48

Incidence of crying and shaken baby syndrome



Acta Paediatrica, 2008;97:782-785

49

Clinical presentation

- Irritability
- Lethargy
- Vomiting
- ALTE/BRUE
- Seizures
- Respiratory distress
- Cardiopulmonary arrest
- Coma
- Brain death

50

Misdiagnosis

- 31% of children and infants with AHT were initially misdiagnosed
- Misdiagnosed victims were more likely to be:
 - Younger
 - White
 - Less severe symptoms
 - Live with both parents

Jenny C. JAMA. 1999;281:621-6

51

Obtaining the History

- When was the child last seen well?
- When did symptoms first occur?
- What were the symptoms?
- What did the caregivers do at that time?
- Was CPR attempted?
- When was help called?
- What kind of help was called?

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Child Protection Team

- Provider on call 24/7
- Always happy to answer questions
- 271-3636

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**OKLAHOMA TRAUMA SYSTEM QUALITY IMPROVEMENT PROCESS
REFERRAL FORM**

Please complete this form and attach related records.

Reporting individual contact information		<input type="checkbox"/> I wish to remain anonymous
<i>Date</i>		
<i>Full name and title</i>		
<i>Organization</i>		
<i>Telephone number</i>		
<i>Email address</i>		
Patient information for review		
<i>Date of incident</i>		
<i>Name of patient</i>		
<i>Patient date of birth</i>		
<i>Your medical record#</i>		
<i>Name of any other involved agency/facility</i>		
Reason for requesting review: (Check all applicable boxes and include a brief narrative)		
<input type="checkbox"/> <i>Good Job!</i>		
<input type="checkbox"/> <i>Incorrect application of the Trauma Triage, Transport, and Transport Algorithm</i>		
<input type="checkbox"/> <i>Deviation from Regional Trauma Plan</i>		
<input type="checkbox"/> <i>Delay in care</i>		
<input type="checkbox"/> <i>Communication problems</i>		
<input type="checkbox"/> <i>Refusal</i>		
<input type="checkbox"/> <i>Other(please specify)</i>		
Additional information:		

Mail, fax, or email to:
 OKLAHOMA STATE DEPT. OF HEALTH
 EMERGENCY SYSTEMS: Attn. CQI
 123 Robert S Kerr Ste.1702 Oklahoma City, OK 73102
 Phone: (405) 271-4027 Fax (405) 271-1045
 Email: esystems@health.ok.gov

REGIONAL TRAUMA ADVISORY BOARD
Authorized Representative Form

DATE: _____

- NEW APPOINTMENT
 UPDATED APPOINTMENT

TRAUMA REGION:

- | | | |
|-----------------------------------|--|--------------------------------------|
| <input type="checkbox"/> NW REG-1 | <input type="checkbox"/> EC REG-4 | <input type="checkbox"/> TULSA REG-7 |
| <input type="checkbox"/> NE REG-2 | <input type="checkbox"/> SE REG-5 | <input type="checkbox"/> OKC REG-8 |
| <input type="checkbox"/> SW REG-3 | <input type="checkbox"/> CENTRAL REG-6 | |

ORGANIZATION NAME: _____

INDIVIDUAL AUTHORIZING APPOINTMENT OF RTAB REPRESENTATIVES:

Name: _____

Job Title: Hosp Admin. /or _____ EMS Director /or _____

Signature: _____

DESIGNATED REPRESENTATIVE: (please print legibly)

Name: _____

Job Title: _____

Email: _____

Telephone: _____

Facsimile: _____

ALTERNATE REPRESENTATIVE: (please print legibly)

Name: _____

Job Title: _____

Email: _____

Telephone: _____

Facsimile: _____

***** Please fax to the Emergency Systems at (405) 271-4240*** Update Annually*****

Office Use Only:	
___ Distribution List	___ Attendance Roster
___ Sign in Form	___ Vote Call Form
(If new facility/agency – update rotation – trauma plans)	