Welcome to the NCCHC Webinar

Gunshot Wounds in Youthful Offenders: Perspectives from the Cook County Juvenile Center

September 7, 2016
10:00 a.m. – 11:00 a.m.
Central Daylight Time
Gunshot Wounds in Youthful Offenders: Perspectives from the Cook County: Juvenile Center

Please note: This webinar does not offer Continuing Education credit.

This informational webinar was developed by independent experts. The information provided in this webinar is not the official position of NCCHC but rather expert opinion. This information is not intended to be appropriate for every clinical situation nor does it replace clinical judgment.
Gunshot Wounds in Youthful Offenders
Perspectives from the Cook County: Juvenile Center

The following presentation contains graphic medical images and may not be suitable for all viewers.
Your Presenters

**Ngozi Ezike, MD, CCHP**, Medical Director, Cermak Health Services at CCJTDC, Assistant Professor of Pediatrics, Rush University

**Faran Bokhari, MD**, Chairman, Cook County Trauma & Burn Unit, John H. Stroger, Jr. Hospital, Chicago

**J. Brian Conant, PsyD, CCHP**, Mental Health Program Director, The Isaac Ray Center at CCJTDC

**ACKNOWLEDGEMENT**

**Josie Mabalay, MA, CCHP**, Program Director
Cermak Health Services at JTDC
An Overview of the Problem

• Ngozi Ezike, MD, CCHP, Medical Director, Cermak Health Services at CCJTDC, Assistant Professor of Pediatrics, Rush University
Most Prevalent Health Conditions Encountered at JTDC

- Asthma
- Obesity
- Gun Shot Wounds!
- Gingivitis
- Impaired Visual Acuity
- Elevated Blood Pressure
- Sexually Transmitted Infections
Leading causes of deaths among adolescents 15-19 years of age:

- Accidents (unintentional injuries)
- Suicide
- Homicide

http://www.cdc.gov/nchs/fastats/adolescent-health.htm
Statistics on Youth Gun Violence in US

• More than 30,000 people killed by firearms annually
• More than 300 people are shot each day (1/3 under the age of 20)
• Homicide is the leading cause of death among 15-24 year olds
Statistics on Youth Gun Violence in U.S.

- Firearm injuries are the cause of death of 18 children and young adults (24 years of age and under) each day in the U.S. ¹
- Children and young adults (24 years of age and under) constitute 38% of all firearm deaths and non-fatal injuries ²
Statistics on Gun Violence at JTDC

• 18% of youth admitted to JTDC have gun shot wounds.
  – Review of 100 randomly selected active patient charts July 2016

• Every week, the health staff is made aware of former JTDC youths who were killed via gun violence
Recent Injuries seen at JTDC resulting from Gun Shot Wounds

- Bone Fractures
  - Upper extremity
  - Lower extremity
  - Facial
- Nerve damage
- Cerebral hemorrhage resulting in Stroke
- Lung hemorrhage with resultant Lobectomy
- Spinal Stenosis
- Abdominal Organ Damage s/p laparotomy
- Retained bullet fragments
- Gaping wounds
The High Costs of Gun Violence

• Medical costs
• Mental Health costs
• Criminal justice system costs
• Chronic disability and impairment
The High Costs of Gun Violence

• Opportunity cost of youth who lose out on potentially lucrative technical, manual or athletic careers due to debilitating injuries from gun shot wounds
Health Disparities in Gun Violence

• African American youth continue to experience the highest mortality rate due to gun violence. 4

• Increased rate of mortality and morbidity in minority youth reveals a significant health disparity.

• Medical, public health and juvenile justice leaders should be on the frontlines to combat this disparity. 4
Gun Violence is a Public Health Crisis

• American Public Health Association identifies gun violence as “a leading cause of preventable death in the United States”

• A joint “call to action” issued Feb 2015 by AAFP, AAP, ACEP, ACOG, ACP, ACS, and APA to tackle the public health crisis
References

   http://webappa.cdc.gov/sasweb/ncipc/dataRestriction_inj.html


Penetrating Trauma Cases

• Faran Bokhari, MD, Chairman, Cook County Trauma & Burn Unit, John H. Stroger, Jr. Hospital, Chicago
The Department of Trauma and Burn Services
Cook County Trauma/Burn Surgeons
Figure 1. Annual Firearm Mortality – U.S., 1981-2007

From 1981 to 2007, an average of almost 33,000 Americans have died each year from firearm deaths.


* Beginning in 1999, mortality data have been coded using ICD-10 codes. Graphs that include data from 1999 have a break in the trend line because the National Center for Health Care Statistics has recommended not combining these data.
Trauma related 1-year mortality by mechanism (per 100,000 population) in the United States from 2000 to 2010.

AAST 2013 Plenary Paper
The epidemiology of trauma-related mortality in the United States from 2002 to 2010
Robert G. Sise, MBA, MPH, Richard Y. Calvo, PHD(c), David A. Spain, MD, Thomas G. Weiser, MD, MPH, and Kristan L. Staudenmayer, MD, MS, Stanford, California
Figure 8. Age-Adjusted Firearm Mortality Rates per 100,000 Population, by Intent. Based on single year available data between 1990 and 1995*

Homicide Weapon of Choice in USA in 2008

- Firearms: 68%
- Handguns: 71%
- Rifles: 4%
- Shotguns: 5%
- Firearms, type not stated: 19%
- Other guns: 1%
- Other (including narcotics, drowning, and poisoning): 7%
- Blunt objects (clubs, hammers, etc.): 4%
- Knives or cutting instruments: 13%
- Personal weapons (hands, fists, feet, etc.): 6%
- Fire and explosives: 1%
- Strangulation and asphyxiation: 1%
Figure 11. Firearm Homicides, Ages 15-54, by Race, and Gender—U.S., 2007
The 12,632 firearm homicide victims in 2007 were disproportionately male, younger than 40, and black.

Source: National Center for Injury Prevention and Control, CDC.
*Age-adjusted rate per 100,000 U.S. Standard population based on year 2000 standard
Between the Eyes

- Intubate?
- W/U?
Between the Eyes
Between the Eyes
Between the Eyes
Good Luck
The near miss

- GSW to the head
- PT Alert
The near miss
Now what?

• IV ABX/ Oral ABX?
• Suture not suture?
The near mess
The near miss
The near miss

• Beware benign appearing trajectories
Bullet under skin
Infection
Bird Shot
Fresh GSW
FXS
Another GSW—Don’t miss
Inside Damage
Right Colon
Final Thoughts

- Guns cause more injury than knives
- GSWS can get infected
- Benign appearance can be misleading
- Bullet wounds can be hidden in creases
PTSD and Gunshot Wounds

• J. Brian Conant, PsyD, CCHP, Mental Health Program Director, The Isaac Ray Center at CCJTDC
PTSD and Gunshot Wounds

• Diagnostic criteria for PTSD
• Rates of PTSD amongst GSW victims
• The experience of getting shot
• Case study
• The challenge of diagnosing and treating PTSD in correctional environments
PTSD and Gunshot Wounds

“All violence is an attempt to replace shame with self-esteem.”
–James Gilligan
PTSD and Gunshot Wounds

• A: Exposure to actual or threatened death, serious injury, or sexual violence
  – Experiencing
  – Witnessing in person
  – Learning that the event occurred to close family member or friend
  – Experiencing repeated or extreme exposure to aversive details of event

• B: Presence of one (or more) of the following intrusion symptoms:
  – Memories
  – Dreams
  – Dissociative reactions (flashbacks)
  – Intense psychological distress at exposure to internal or external cues
  – Marked physiological reactions to internal or external cues
PTSD and Gunshot Wounds

• C: Persistent avoidance of stimuli associated with the traumatic event as evidenced by one or both of the following:
  – Avoidance of or efforts to avoid distressing memories, thoughts or feelings about the event
  – Avoidance of or efforts to avoid external reminders that arouse distressing memories thoughts or feelings about the event

• D: Negative alterations in cognitions and mood associated with the traumatic event as evidenced by two or more of the following:
  – Inability to remember aspects of the event
  – Negative beliefs or expectations about self, others, world
  – Distorted cognitions about the cause of the event
  – Persistent negative emotional state
  – Anhedonia
  – Detachment
  – Inability to experience positive emotions
PTSD and Gunshot Wounds

• **E:** Marked alteration in arousal and reactivity associated with the traumatic event:
  – Irritable behavior and angry outburst (with little or no provocation) typically expressed as verbal or physical aggression towards people or objects
  – Reckless or self-destructive behavior
  – Hypervigilance
  – Exaggerated startle response
  – Concentration problems
  – Sleep disturbance

• **F:** Duration is more than 1 month

• **G:** Clinically significant distress or impairment

• **H:** Not attributable to substances or medication
PTSD and Gunshot Wounds

- According to the National Center for PTSD, 7-8% of the U.S. population will have PTSD at some point in their lives.
- In a 2011 study conducted at Cook County Hospital, it was found that patients with gunshot wounds were 13 times as likely as those with falls and twice as likely as those in a motor vehicle crash to have a positive screen for PTSD.
- More than half of all gunshot victims in the study screened positive for PTSD.
- Another study conducted in Atlanta concluded that rates of PTSD in inner-city residents are as high or higher than rates seen amongst Iraq, Afghanistan or Vietnam veterans.


PTSD and Gunshot Wounds

The experience of getting shot

From *Writing My Wrongs: Life, Death, and Redemption in an American Prison* – Shaka Senghor

“When the first of the three bullets tore into my flesh, I felt my shinbone crack. Immediately, my shoe filled with blood, sloshing around as I fled the scene...I wanted to shoot someone so bad, it was killing me. I hated being a victim, and the only thing that would restore balance was getting revenge...”

“When we arrived at the hospital I felt like I was being moved through an assembly line manned by robots, the staff didn’t show me any extra compassion, in Detroit, it was business as usual to see a child who had been shot.”
PTSD and Gunshot Wounds

The experience of getting shot (cont.)

“Throughout the whole ordeal, no one hugged me. No one had counseled me or told me that everything would be okay. No one came to talk to me and explain all of the emotions I was feeling. No one told me that if I didn’t find a way to deal with the fear I felt, I would become paranoid; I would reach a point where I would rather victimize someone else that become a victim. No one explained to me that cars weren’t; galloping chariots of death…so I coped with it the only way I knew how. I became angry, and I began carrying a gun with me everywhere I went.”
PTSD and Gunshot Wounds

- Case study:
  - 15 yo AA male
  - Multiple admissions to JTDC
  - GSW to abdomen
  - Large scar on abdomen
  - Colostomy as a result of the injury
  - Intellectual functioning problems
  - Significant problems with defiant behavior, rule violations
  - Instrumental aggression
  - Frequent suicide threats, suicide gestures, and demands to be psychiatrically hospitalized
  - Use of the colostomy bag as a weapon
  - Avoidance of having bag emptied and changed
  - Denial issues
  - On most recent admission, refusal to have colostomy reversed
PTSD and Gunshot Wounds

The challenge of diagnosing and treating PTSD in correctional environments

– Differential diagnosis and symptom overlap
  • Mood Disorders, ADHD, Behavior Disorders, PTSD
    – Our bias is usually to conclude that youth in detention are displaying behavior disorder symptoms rather than PTSD symptoms
– The desensitized working with the desensitized
– The correctional environment exacerbates PTSD symptoms
– Provider avoidance
  • “You should never discuss traumatic experiences in short term detention settings”
  • “Don’t want to open psychological wounds with those who will be leaving soon.”
– Burnout, bias, and vicarious traumatization
• Please provide your perspective on the best approach to post-operative wound care as provided in the detention center. Please elaborate specifically on dressing changes.
QUESTIONS

• Please provide information on the risks of lead poisoning in the child after suffering a gunshot wound.
QUESTIONS

- Please describe and elaborate on PTSD in the context of trauma informed care and how this is provided in the juvenile detention setting.
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THANK YOU!

For questions about this webinar, please contact

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