Excited Delirium Syndrome

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Cases

Donald Lewis vs. West Palm Beach
TASER
2007 Robert Dziekanski vs. Royal Canadian Mounted Police
Matthew Bolick in Grand Rapids
Introduction

Debate

- Does it exist? "a unique Syndrome"
- Used to "excuse & exonerate" - possible "conspiracy or cover-up for brutality"

Name - "Syndrome"

How is it diagnosed?

TASER

Potentially fatal - may be amenable to intervention

Definition

Wikipedia:

Condition that manifests as a combination of delirium, psychomotor agitation, anxiety, hallucinations, speech disturbances, disorientation, violent and bizarre behavior, insensitivity to pain, elevated body temperature and superhuman strength

Syndrome = sudden death
History

Dr. Luther Bell - Bell's Mania 1849
McLane Asylum for the Insane in Massachusetts
Advanced mania & fever - "Exhaustive Mania"
75% Mortality

mid-1950s
Antipsychotic Rx --> less Mortality
De-institutionalization

History Continued...

1960s - Neuroleptic Malignant Syndrome (NMS)
a/w Dopamine antagonist use or withdrawal
1985 Wetli & Fishbain
"Excited Delirium" in a cocaine body packer
1988 Kosten and Keiber
"Cocaine-Induced Excited Delirium" variant of NMS

Pathophysiology

Unknown
Dopamine transporter abnormality
Genetic susceptibility
Multifactorial trigger
Metabolic Acidosis
Rhabdomyolysis
Pathophysiology

Cocaine blocks the dopamine transporter
- Too much Dopamine
  - Hyperthermia
  - Paranoia

Cocaine
- Alpha-adrenergic
- Increased demand
- Decrease supply

Statistics - Epidemiology

Men >95%
Mean Age: 36yrs
African American
Acute drug binge with long history of abuse
Psychiatric illness w/ or w/o w/d Rx
Many deaths are NOT preventable
True medical emergency but true numbers unknown
Typical Course

Acute drug intoxication
Struggle - physical, pepper spray, TASER
Sudden unexpected quite death while in custody
Inconclusive Autopsy/Tox
  “Debate”
  Drug levels are at non-lethal levels

Videos
Signs/Symptoms

| Paranoia/Hallucinations | Tachycardia |
| Crazy speech/shouting   | Tachypnea   |
| Disorientation          | Hyperthermia|
| Agitation/Noncompliance | Profuse sweating |
| Hyper-aggression        | Inappropriately clothed |
| Strength/endurance      | Mirror/Glass |

Clinical Characteristics

Excited/Agitated State
- Ongoing struggle despite futility

Autonomic dysregulation

Delirium
- Disturbance of consciousness - reduced clarity or awareness/loss over short period of time

Diagnosis

Spectrum of behaviors and signs overlap with many clinical disease processes
- one of exclusion established on autopsy
**Differential Diagnosis**

Panic attack  
Heat stroke  
Diabetic Crisis  
Head injury  
Delirium tremens  
Hyperthyroidism

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**Differential Diagnosis**  
Altered Mental Status

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**Law-Enforcement**

Bad situation from start  
Expectation to defuse to perfect outcome  
Problem is “out of touch with reality”  
Tools often ineffective
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ExDS medical risk >> TASER effects

Unlikely that TASER -> ExDS

**LEO Goals**

Recognize ExDS
Take subject into custody quickly, safely and efficiently
Turn care over to EMS STAT
Document tactile temperature

**EMS**

Dispatch - recognize clues

Scene Safety

Understand and practice expected interaction with LEOs
LEOs provide control to allow EMS to recognize the medical emergency to assess & care for the patient
Treatment

Death may occur suddenly
Location during "control measures?"

Chemical Sedation
Full Medical Monitoring
Supportive Care

Treatment

Largely speculative and consensus-driven
Supportive care and reversal of obvious clinical abnormalities
First-Line
AGGRESSIVE CHEMICAL SEDATION

Agitation
TREATMENT
EMS Protocols

Summary

Real syndrome of uncertain etiology
Delirium, agitation, hyperadrenergic autonomic dysfx
  a/w acute on chronic drug abuse
  a/w serious mental illness
Sudden unexpected quite DEATH
Early recognition/treatment MAY benefit

Thanks!!

Questions??