Excited Delirium

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Objectives

- Excited Delirium
- Restraints
- Medical Management

What is Excited Delirium?

- A mental state characterized by an acute onset of disorientation, disorganized thought process, speech abnormalities and violent behavior.

What is Excited Delirium?

- An imminently life threatening medical emergency…
- Not a crime in progress!

Patient Presentation

- Aggressive and Violent
- Super Human strength
- Bizarre behavior and thoughts
- Extreme Agitation
- Hallucinations, paranoia
- Confusion
- Disorientation
- Hyperthermia (sweating, disrobing)

Behavioral Components:

- Violent, sometimes fearless and taunting
- Continuing to fight after restraints are in place
- Bizarre actions
- Disrobing
- Aggression toward inanimate objects
- Mood swings- alternating from docile to extreme agitation
- Incoherent speech and grunting

Psychological Components:

- Intense paranoia
- Extreme agitation
  - Aggravated by efforts to subdue and restrain
  - Not likely to comply after multiple tasers
- Hallucinations
- Disorientation
- Delusional

Physical Components

- Incredible strength
- Unrelenting endurance
- Unfazed by Taser shocks
- Hyperthermia (104 – 113 degrees)
- Profuse sweating (even in cold weather)
- Respiratory distress
- Dilated pupils from sympathetic discharge
- Diminished sense of pain

Excited Delirium Pathophysiology

- Sympathetic nervous system outflow
- Hyperthermia
  - Extreme body temperature elevation
- Metabolic Acidosis
  - Potentially life threatening
  - Secondary to hyperactivity

Excited Delirium: Contributing Factors

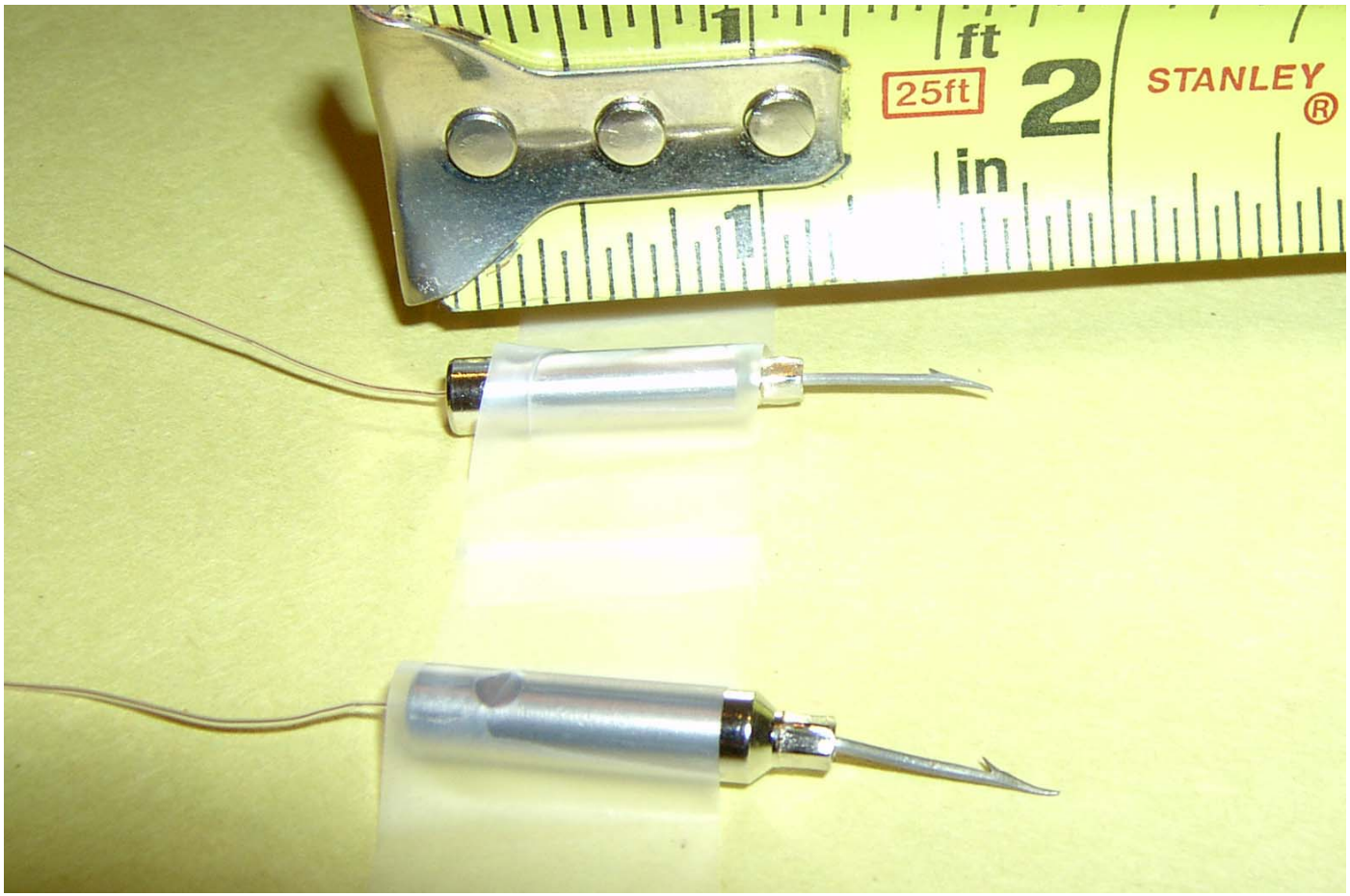
- Stimulant Drug Abuse
  - Cocaine, PCP, methamphetamine, etc
- Underlying psychiatric disease
- Noncompliance with medications to control psychosis or bipolar disorder
- Alcohol withdrawal

Taser use in the Excited Delirium (ExDS) Patient

Often Law Enforcement (LE) is first on scene

- May have attempted oral or physical restraint
- May have attempted to subdue the patient with the use of a Taser device
- Literature has confirmed that Tasers provide an overall safe option for non-lethal force

Taser Darts



Taser Injuries

- Though rare, Taser injuries might include:
  - Muscle Contraction Injuries
    - Stress fractures
    - Muscle or tendon strain or tears
    - Back injuries
    - Joint injuries
  - Injuries from Falls
    - May be serious depending on the height

Taser Injuries

- Minor Surface Burns
  - Due to arcing
- Tasers may ignite flammable liquids and gasses causing a potential for serious burns
- Penetrating Eye Injuries

Remember, Maryland Medical Protocol Does Not Allow for Dart Removal by EMS Providers

They are to be treated like an impaled object

Source: Taser International X26 User Course V12, November 2004

In-Custody Deaths: Potential Causes

- Excited Delirium
- Hyperthermia
- Positional Asphyxia
- Use of Stimulant Drugs
- Use of lethal force when other options exhausted

Restraining the Excited Delirium Patient

- Many believe there is a relationship between the physical restraint of a patient experiencing excited delirium and the potential for sudden death.

Physical Restraint Issues

- Positional Asphyxia
  - Deaths have occurred with subjects restrained in a prone position
  - Adverse effects on breathing can occur when pressure is applied to a patient's back (handcuffed, hog-tied)
  - Maryland Medical Protocol states: Restrained patients "should be transported

    face up or on his/her side, if at all possible".

The behavioral features of excited delirium include criminal acts, but…

Excited delirium is not a crime in progress, and providers must try to recognize the difference, before it's too late.

Excited delirium is an imminently life-threatening medical emergency

Patients with excited delirium need aggressive medical intervention. But most cases start out as a BLS dispatch

Once Excited Delirium is suspected, BLS units should call for an ALS response

Consider Other Causes of Altered Mental Status

- Head injury
- Dementia (Alzheimer's Disease)
- Hypoglycemia
- Hypoxia
- Epilepsy
- Stroke

Initial Interventions for Excited Delirium Patients

- Attempt verbal de-escalation
- Summon back-up quickly (ALS, LE, manpower)
- Back off and contain the subject without physical restraint while waiting for assistance
- Consider chemical restraint usage early if patient presents as unmanageable w/o physical restraint.

MIEMSS Chemical Restraint Protocol

- Review Maryland Medical Protocol on Physical and Chemical Restraints (CR)

Treatment and Transport

- Apply restraints as necessary
- Do not transport patient face down if at all possible
- Assign a specific provider to continuously monitor the patient's airway
- Bring police with you in the ambulance
- Use cold packs to cool patient [if hyperthermic]
- Make every effort to provide other treatments: oxygen (blow-by O2 if pt won't tolerate a mask or cannula), glucose level, IV, EKG, etc *document if cannot perform a task you would normally perform.

Chemical Restraint Medication Protocol (with consultation now)

Adults

- (1) Administer combined medications of haloperidol and midazolam which can be mixed in the same syringe. (If patient has head injury consider administration of only midazolam.)
  - a. **Patient 15-69 years of age:**
    (i) Haloperidol 5 mg IM/IV **and**
    (ii) Midazolam 5 mg IM/IV
  - b. **Patient greater than 69 years of age:**
    (i) Haloperidol 2.5 mg IM/IV **and**
    (ii) Midazolam 2.5 mg IM/IV
- (2) Repeat doses may be given with medical direction.

Pediatric Chemical Restraint Medication Protocol

Pediatric

(1) Administer haloperidol only (without Versed).

a. **Contrindicated in patients under 6 yrs.**

b. **6-11 years of age**

(i) Haloperidol 0.05 mg/kg IM/IV

(ii) Max dose 2.5 mg

c. **12-14 years of age**

(iii)Haloperidol 2.5-5 mg IM/IV

(2) Repeat doses may be given with medical direction.

Chemical Restraint Protocol con't

- Continuous aggressive monitoring of the patient's airway and breathing must occur in all restrained patients. Ongoing findings must be documented on the patient care report
- Monitor vital signs, ECG, and pulse oximetry.
- Prepare to treat hypotension: fluid challenge
- Reason for restraint use must be fully documented on the patient care report

Other ALS Interventions

- Dehydration/Metabolic Acidosis:
  - IV RL X 2 W/O
  - Sodium Bicarbonate
- Hyperthermia:
  - Cool environment, disrobe, fanning, cold packs to neck, groin, axilla
- Hyperkalemia:
  - Calcium Chloride
- Rapid transport

Safety

- Remember the safety of you and your crew is paramount.

Caveats

- Never place an agitated and combative patient in an ambulance without physical restraints.
- Never transport a restrained patient without a police officer present who can unlock the restraints.

Excited Delirium Controversy

- Currently Excited Delirium is not recognized by the American Medical Association or the American Psychological Association.
- Civil liberties groups have argued that in-custody deaths were the result of excessive force by police officers and not Excited Delirium.

Excited Delirium Controversy (Cont.)

However:

- Excited Delirium is recognized by the American College of Emergency Physicians, as well as the National Association of Medical Examiners
- The DOT has included Excited Delirium to its curriculum for Emergency Medical Technicians

Summary

- Excited Delirium is an imminently life threatening medical emergency, not a crime in progress.
- In-custody deaths likely related to excited delirium.
- ALS providers can give chemical restraint medications (with consultation)
- Aggressive medical stabilization needed