



Behavioral Neurology & Neuropsychiatry Case Conference

Disrobing Associated with Epileptic Seizures and Forensic Implications

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Seizure-related disrobing

- May occur as either an ictal automatism or during the postictal period
- Regardless of how one ends up in public without clothing, it may result in substantial criminal charges and penalties
- Even when unexplained nakedness occurs in the medical setting, seizures are infrequently considered in the differential diagnosis*

*Maytal G, Smith FA, Stern TA. Naked patients in the general hospital: differential diagnosis and management strategies. *Psychosomatics* 2006;47(6):486-90

Exhibitionism v. Epilepsy

- Need to consider seizures in cases involving “exhibitionism” last advanced in two case reports offered by Hooshmand in 1969*
- The “epilepsy defense,” while prominently featured in the forensic literature, is generally associated with violent or assaultive behaviors
- Many cases offered wherein defendants attribute criminal actions to seizures, but many such claims are lacking in medical credibility, with acts grossly appear premeditated and deliberate

*Hooshmand H. Temporal lobe seizures and exhibitionism. *Electroencephalogr Clin Neurophysiol* 1969;27(5):550.

Jack Ruby's Defense

- Claimed he shot Oswald during seizure
- Thus unable to appreciate the nature and wrongfulness of actions
- Battle of experts surrounded different interpretations of a rhythmic temporal theta burst electroencephalographic abnormality



Gutmann L: Jack Ruby. *Neurology* 2007;68(9):707-8

This case, and others like it, has arguably contributed to an atmosphere of cynicism when defendants attribute behaviors to seizures.

“Epilepsy Defense”

- Routinely encounters skepticism and deployed
- Literature establishes that seizures rarely yield violence
- But other behaviors that may manifest during or after seizure are sparsely reflected in the current literature
- Such behaviors may not warrant skepticism generally afforded to “epilepsy defense”
- ***Disrobing associated with epileptic seizures represents such an exception***

Methods

- Patients experiencing seizure-related disrobing retrospectively identified via chart review at the Epilepsy Clinic at the UCDHSC
- Medical records reviewed for clinical presentation, localization, imaging data, and forensic consequences in a series of patients with ictal, postictal, and coincidental disrobing.
- Defined coincidental disrobing as a seizure occurring when the patient was already in an undressed state
- Ictal/postictal disrobing defined as disrobing occurring after the patient's seizure began.
- IRB approval was obtained for the purposes of this retrospective case series report

Case #1: *Documented Ictal Disrobing*

- Female, mid-thirties, with seizures that begin with aura of “needing to look for something” followed by prominent sensations of heat
- Patient often fans self during seizures
- During a clinic visit, observed to have a complex partial seizure during which she reached into blouse and pulled out bra

Case #1: *Documented Ictal Disrobing*

- In EMU had two complex partial seizures; one involved disrobing behavior.
 - Seizure began with sitting in bed talking normally to husband
 - Became restless
 - 10 seconds after onset of 4 Hz right temporal activity chewing movements began. 32 seconds after onset began fanning herself with her right hand.
 - 2:10 after onset electrical activity stopped for 8 seconds. Resumed at 8 Hz in right temporal electrodes
 - 5 seconds later she unbuttoned pajama top
 - Bilateral rhythm ictal electrode activity continued to gradually increase . Seizure evolved into secondary GTC seizure.

Case #2: *Documented Postictal Disrobing*

- Male, early-thirties, history of pharmacologically intractable seizures
- With nearly 80% of ictal events removes clothing and tries to leave the vicinity
- Complex partial seizures with frequency of about one a week
- Frequently secondarily generalize into tonic clonic seizures

Case #2: *Documented Postictal Disrobing*

- In EMU had right temporal lobe onset complex partial seizure with secondary generalization
 - Remained quiet postictally for 2.5 minutes, then sat up in bed and pulled off his shirt
 - After an additional thirty seconds pulled off head wrap, then removed his trousers
- Had another seizure with right temporal lobe onset that did not secondarily generalize
 - 30 seconds after electrographic event ended quickly removed all clothing

Case #3: *Coincidental Disrobing*

- Male, early-forties, history of GTC seizures since age 30.
- Seizures invariably occur during sleep, frequency of 1 per month
- Brain MRI and routine EEG normal
- Reportedly had GTC seizure while sleeping in nude with his girlfriend. Exited bed and wandered, was seen by his girlfriend's underage daughter.
 - did not acknowledge her presence.
 - amnesic to episode
- Convicted of indecent exposure to a minor and incarcerated

Medicolegal Implications

- Long recognized that behavioral manifestations of seizures may incur legal consequences*
 - 1888: Charcot described patient encountered legal trouble after boarding train without ticket during nonconvulsive status epilepticus
- But medical literature suggests seizures are rarely cause of criminal acts
- Defense strategies seldom prove successful, and frequently viewed with great skepticism

*Reuber M, Mackay RD. Epileptic Automatisms in the Criminal Courts: 13 Cases Tried in England and Wales between 1975 and 2001. *Epilepsia* 2007;49(1):138-145.

Medicolegal Implications

- Case series demonstrates epileptic phenomenon can and do result in disrobing behaviors
- May result in adverse legal outcomes for genuine epilepsy patients
- Hooshmand provided early indication that ictal disrobing may constitute legitimate legal defenses
- But medicolegal literature since then essentially neglects ictal disrobing, instead focusing on seizures and violence

Medicolegal Implications

- At the same time, society's intolerance for crimes of a sexual nature has resulted in escalating consequences
- Near-zero-tolerance for precisely the sort of behaviors that may be the product of ictal disrobing
- Resulting legal atmosphere is one that may scoff at legitimate defenses while dispensing improper convictions and unwarranted punishments

Colorado Revised Statutes...

- **Article 7 Offenses Relating to Morals**

- **18-7-301. Public indecency**

- (1) Any person who performs any of the following in a public place or where the conduct may reasonably be expected to be viewed by members of the public commits public indecency:
 - (a) An act of sexual intercourse; or
 - (c) A lewd exposure of an intimate part as defined by section 18-3-401(2) of the body, not including the genitals, done with intent to arouse or to satisfy the sexual desire of any person; or
 - (d) A lewd fondling or caress of the body of another person; or
 - (e) A knowing exposure of the person's genitals to the view of a person under circumstances in which such conduct is likely to cause affront or alarm to the other person.

Colorado Revised Statutes...

– 18-7-302. Indecent exposure

(1) A person commits indecent exposure:

- (a) If he or she knowingly exposes his or her genitals to the view of any person under circumstances in which such conduct is likely to cause affront or alarm to the other person with the intent to arouse or to satisfy the sexual desire of any person;
- (b) If he or she knowingly performs an act of masturbation in a manner which exposes the act to the view of any person under circumstances in which such conduct is likely to cause affront or alarm to the other person.

Colorado Revised Statutes...

– **18-21-101. Legislative Declaration**

The general assembly hereby finds, determines, and declares that the commission of sex offenses exacts an unacceptable toll on the fiscal resources of both state and local government and thereby increases the fiscal burden upon the taxpayers of this state. It is the intent of the general assembly in enacting this article to require, as much as possible, that persons convicted of a sex offense pay for the cost of the evaluation, identification, and treatment and continuing monitoring to protect victims and potential victims as described in article 11.7 of title 16, C.R.S.

Medicolegal Role

- Reality of seizure-related disrobing does not obviate need for case-by-case assessment
- Some guidance in initially assessing viability affirmative defenses is appropriate
- Fenwick* offers useful set of six points in considering whether a potential illegal act was result of seizure
- While guidelines were not written with ictal disrobing in mind, they are readily applicable

*Fenwick P, Walker MC. Epilepsy and the law. Ch 55 in Sander JW, Rugg-Gunn FJ, Smalls JE, editors. Epilepsy 2009: From Benchside to Bedside. A Practical Guide to Epilepsy. Lecture notes from the Twelfth Epilepsy Teaching Weekend, 18-20 September 2009, St. Anne's College, Oxford. Chalfont St Peter, Bucks: International League Against Epilepsy (UK Chapter) & National Society for Epilepsy, 2009, 487-90.

6 Points to Consider

- Patient should have prior diagnosis of epilepsy. Criminal behavior resulting from first seizure is very unlikely.
- Act should be out of character for individual and contextually inappropriate to surrounding circumstances.
- Evidence of premeditation or concealment should be lacking.
- Witnesses, if available, describe disorder of consciousness at relevant time.
- Memory for the act should be impaired.
- Diagnosis of automatism/epilepsy remains a clinical diagnosis. Studies (EEG or MRI) may be helpful, but diagnosis ultimately derived from clinical grounds.

Conclusions

- Seizure-related disrobing may not be an uncommon behavior
- We identified cases involving ictal disrobing, with events captured via video-EEG monitoring, definitively establishing medical reality of such behaviors
- Track record featuring dubious “epilepsy defenses” has yielded a legal atmosphere of skepticism to such claims

Conclusions

- Evidence and anecdotes behind this history largely specific to violent crimes, and should not generalize to other actions that may be seizure related
- Clinical phenomenon of disrobing associated with seizures needs to be recognized by medical and legal professionals
- Absent this understanding, seizure patients are liable to incur unjust verdicts and punishments, further adding to their stigma and suffering

Thanks!

Questions & Comments...

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Baby Daphne loves Dinger!