

ISSN: 2577-2007



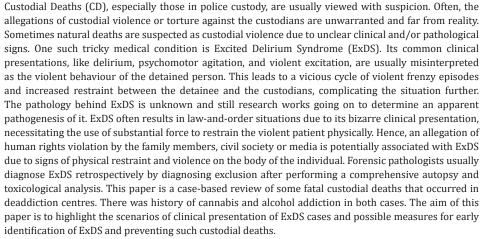
# **Excited Delirium Syndrome and Custodial Deaths**

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#### **Abstract**



Keywords: excited delirium syndrome; custody; death; agitation; delirium; addiction

allegations of custodial violence or torture against the custodians are unwarranted and far from reality. Sometimes natural deaths are suspected as custodial violence due to unclear clinical and/or pathological signs. One such tricky medical condition is Excited Delirium Syndrome (ExDS). Its common clinical presentations, like delirium, psychomotor agitation, and violent excitation, are usually misinterpreted as the violent behaviour of the detained person. This leads to a vicious cycle of violent frenzy episodes and increased restraint between the detainee and the custodians, complicating the situation further. The pathology behind ExDS is unknown and still research works going on to determine an apparent pathogenesis of it. ExDS often results in law-and-order situations due to its bizarre clinical presentation, necessitating the use of substantial force to restrain the violent patient physically. Hence, an allegation of human rights violation by the family members, civil society or media is potentially associated with ExDS due to signs of physical restraint and violence on the body of the individual. Forensic pathologists usually diagnose ExDS retrospectively by diagnosing exclusion after performing a comprehensive autopsy and toxicological analysis. This paper is a case-based review of some fatal custodial deaths that occurred in deaddiction centres. There was history of cannabis and alcohol addiction in both cases. The aim of this paper is to highlight the scenarios of clinical presentation of ExDS cases and possible measures for early

Submission: May 27, 2023

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Published: 

☐ June 15, 2023

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Volume 8 - Issue 3

Postgraduate

Research, India

How to cite this article: ka Prasad Patra\* and Anand P Rayamane. Excited Delirium Syndrome and Custodial Deaths. COJ Nurse Healthcare. 8(3). COJNH. 000689. 2023. DOI: 10.31031/COJNH.2023.08.000689

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#### Background

A person who has displayed a group of signs but not limited to delirium, hallucinations, violent agitation, insensitivity to pain, exceptional strength, lack of tiring and elevated temperature and subsequently succumbs to its complications-may indicate a diagnosis of Excited Delirium Syndrome (ExDS). This diagnosis should be based on an antecedent history of drug withdrawal and substance abuse (especially amphetamines, LSD and alcohol). ExDS often results in law-and-order situations due to its bizarre clinical presentation, necessitating the use of substantial force to restrain the violent patient physically. Hence, an allegation of human rights violation by the family members, civil society or media is potentially associated with ExDS due to signs of physical restraint and violence on the body of the individual. Forensic pathologists usually diagnose ExDS retrospectively by diagnosing exclusion after performing a comprehensive autopsy and toxicological analysis. The hallmark of this condition is the presence of a distinctive group of clinical and behavioral characteristics-a triad of psychomotor agitation, delirium, and violent excitation [1].

Law enforcement authorities are often involved in such cases due to the patient's violent, uncontrollable behaviour that can endanger the safety of the people and the patient. These cases draw considerable attention from media and human rights groups, often levelling allegations of unnecessary physical excesses from the authorities resulting in death. Usually, such cases pose challenges for giving an unequivocal opinion about the cause of death. The civil society members may believe that the term ExDS has been manufactured deliberately

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only to cover up the brutality of the custodial authorities, thereby exonerating them [1,2]. This is a matter of debate among healthcare providers, especially emergency physicians. Thus, the concept that ExDS is a fatal disorder requires multi-centric and multidisciplinary research to understand its practical implications and pathogenesis [3-6].

#### **Case Series**

#### Case-report 1

- A. History: A 42-year-old truck driver, a chronic alcoholic, was detained by the police for unruly traffic behaviour. He gradually became listless, shouting and screaming at the police personnel with craving alcohol. After 12 hours in police custody, he became disoriented, with violent, uncontrollable physical agitation. The situation compelled police to restrain him with his hands and legs tied against the rails of his cell. After two hours of continuous agitation, he suddenly collapsed. He was rushed to the emergency department of our tertiary care hospital, where he was declared 'brought-in dead'. A medicolegal autopsy was ordered involving a panel of autopsy surgeons as per the guidelines for custodial deaths by the National Human Rights Commission of India and the Supreme Court.
- Past medical history: A year back, he had received alcohol deaddiction treatment, e.g., phenytoin sodium, disulfiram [7] and other supportive therapies with neuro-protective I/V injections and hepato-protective tablets (Liv-52). He was diagnosed with a case of Alcohol Dependent Syndrome (ADS) (ICD-10 criteria). His Alcohol Use Disorders Identification Test (AUDIT) score was 30. But he was not sincere in adhering to the medical advice. He used to develop tremors and seizures when he abstained from alcohol for some days. His doctor advised him either to quit his driving profession, or drive under supervision if not possible. One year back, he had a few episodes of tonic-clonic seizures and was treated with anti-epileptic medications. He was addicted to alcohol and gutkha (chewable tobacco preparation containing crushed areca nut, tobacco, catechu, paraffin wax, slaked lime and sweet or savoury flavourings) [6] for last 15-20 years. He had no history of any other mental illness, suicidal tendencies, or any other types of substance abuse. Further, there was no history of head injury, diabetes mellitus, tuberculosis or cardiovascular disease.
- C. Autopsy findings: Multiple superficial abrasions and abraded contusions of varying shapes and sizes were present over the wrists, ankles, arms, thighs and back of the head, suggestive of struggle marks. The internal examination showed congested viscera and organs with occasional petechial haemorrhages over the posterolateral surfaces of the brain, lungs (lower lobes), and heart (left ventricle). The liver was enlarged, weighing 1920gms with mixed nodularity cirrhotic changes on the cut section. The heart was mildly enlarged (300gms) with a large clot in the left atrium. The left ventricle was dilated, thickness (15mm), and showed signs of Dilated Cardiomyopathy (DCM). Histopathological examination showed: of the brain, heart, lungs, liver and kidneys showed features of dilated cardiomyopathy, congestion and haemorrhage in

the sections of the cerebrum, cerebellum and pons; liver-extensive fatty changes with early micronodular cirrhotic changes in the bits of the right lobe; congestive splenomegaly and pulmonary congestion with oedema; kidney bits showed confluent areas of polymorph infiltration and tubular necrosis. The proximate cause of death (CoD) is due to the complications of multiorgan failure. However, one among three autopsy surgeons in the panel preferred to opine cardiac arrest as the proximate CoD.

#### Case-report 2

- History: A 35-year-old married male with known alcoholism history for the last five years was admitted to a De-Addiction Centre (DC) after his doctor's advice. He had co-addiction to smoking cannabis and tobacco. He was diagnosed with Alcohol Dependent Syndrome (ADS) and was under medications similar to Case no.1-disulfiram, naltrexone, acamprosate, and multivitamins. He had occasional episodes of seizures when imposed forced alcohol abstinence by his wife for a week. Hence, phenytoin and vitamin E were added to the regimen by his physician. He was persistently begging for alcohol during his treatment at this center. However, by the fourth day of admission, his craving for alcohol became unstoppable. He became violent without alcohol and threatened the DC staff. With great difficulty, he was overpowered and restrained by his hand and legs to the rails of his bed. This violent agitation continued for 2-3 hours, during which the DC doctor calmed him down with i/m diazepam injection. After about 1-2 hours, he was found unresponsive by the DC nurse. He was referred immediately to a tertiary care hospital, where he was declared 'brought-in-dead'. A medicolegal autopsy was ordered.
- Autopsy findings: Multiple abrasions and abraded contusions were noticed around the right wrist. Circumferential discontinuous bruises ranging from 1.5cm-2.5cm were found around the ankles and the left wrist. Internal examination revealed sub-scalpal hematoma (size-3cmX2cmX0.2cm) over the right temporal-occipital area. The skull and membranes were intact though variable amounts of subperiosteal hemorrhage were noticed over the right side skull. The brain showed variable degrees of oedema and congestion. The patchy confluence of subarachnoid haemorrhages was present on both frontal and occipital lobes. The liver was moderately enlarged (weight 650gm). The cut sections exhibited fatty changes with mild yellowish staining. The rest of all other organs were intact and showed variable degrees of congestion. Histopathological and toxicological findings were similar to that in Case report 1. The cause of death is due to the complications ExDS, i.e., cardiac arrest with co-morbid alcoholdependent syndrome.

#### Discussion

# Excited delirium syndrome-the clinical entity

Excited delirium syndrome is a potentially fatal state of extreme agitation and delirium, especially in detainees on stimulant drugs or hallucinogens, e.g., LSD, Cocaine, methamphetamine, etc. [8-10] Psychiatric patients who suddenly stop taking the medications are more prone to developing ExDS [10,11]. Such cases are at high risk

for sudden death and may mimic an unlawful custodial death due to marks of violence and restraint used to control delirious patients [11].

Fatal Excited delirium syndrome may create a controversial situation if the deaths occur while in custody. Hence, ExDS should be ruled in custodial deaths, especially in cases with a history of alcohol or other substance-use disorders and violent agitation before death [8]. Some authors reported custodial deaths among alcohol addicts in psychiatric asylums, rehabilitation centres and police custody (under trial prisoners) [8-10]. Many of these dead prisoners were addicted to multiple drugs. The common substances of abuse were LSD strips and cannabis cigarettes. Most of these drug addicts (prisoners) had symptoms like withdrawal reactions and violent behaviour and died within a week after detainment [8-11]. In a recent case of custodial death in local news, the police officer in charge is still suspended on allegations of custodial torture and the death of a local gangster. Before death, he was persistently asking for alcohol and was growingly violent and abused (as per the accused police statement), which made the police restrain him with tied legs and hands in custody (which is against the guidelines for holding an undertrial prisoner in a cell, in India). Therefore, the law enforcement agency should be educated and sensitized about the possibility of death in custody from ExDS and how to prevent such deaths [12].

The clinical presentation of ExDS may closely resemble Bell's mania (1849), where the mentally ill individuals who displayed violent, aggressive behaviour were subjected to physical restraint [11]. Nevertheless, in the ninth century (when such cases were reported), there were not many developments in acute management to deal with Bell's mania or ExDS [10,11]. Hence, attempts should be made to understand the exact etiopathogenesis and diagnosis modalities for early detection and to prevent mortality. About half a decade later, with the advances in Psychopharmacology, there was a dramatic drop in such cases with the advent of newer antipsychotic medications, especially chlorpromazine in were instrumental in treating such violent mentally ill patients [11]. Again, around the 1980s, there was an unprecedented increase of such cases in continental America, which was incidentally associated with widespread abuse of cocaine [10]. Characteristically, these fatal cases had a history of drug cocaine abuse, presented with agitated behaviour, clashed with the police and in the ensuing struggle, resulted in death with no definitive cause of death detected even after a full post-mortem examination and toxicological analysis [10]. The ExDS related to alcohol withdrawal has seldom been reported in the literature. Until 1985, no uniform name was available for identifying this syndrome. Wetli & Fishbain [9] proposed the term "Excited Delirium" to describe such cases in cocaine addicts, which found widespread acceptance worldwide [10]. Nevertheless, the same was associated with the abuse of recreational drugs like methamphetamine, Phencyclidine (PCP) and Lysergic Acid Diethylamide (LSD) [13,10,11]. During the early seventies, the precise incidence of ExDS was not studied well, probably due to a lack of uniform definition to identify ExDS. Some authors observed a mortality rate of about 10% in ExDS [13]. Nevertheless, several

fatal cases of ExDS have been reported globally in a wide range of circumstances like, 'law and order' situations to psychiatric institutions and de-addiction centres [9,11,13,14].

## Excited delirium syndrome-a social issue

With two fatal cases of ExDS originating from Alcohol and Tobacco de-addiction centres in quick succession, there is a genuine need on the part of physicians and healthcare providers not only further to investigate the relationship between alcohol withdrawal and ExDS, but also to sensitize the policymakers about it. There are no specific pathological signs known for postmortem diagnosis of ExDS. An autopsy can only confirm the restraint signs, marks of violence and exclude whether or not any physical torture was inflicted on the deceased before death.

In most countries of the Indian subcontinent, inadequate infrastructure and professional manpower are longstanding concerns. Most of these centres usually do not have sufficient physicians for round-the-clock service. For example, a psychiatrist employed as a consultant visits the DC only on weekly basis. Fortunately, during the current decade, there are promising improvements in the scenario in India, with a rapid proliferation of De-addiction centres both in the public and private sectors. The changing trend of society's determination to tackle the problems of alcohol and substance abuse problems indicates that social health education programs are in the right direction. In India, there were recent amendments in regulations to formulate guidelines to regulate private de-addiction centres and to ensure that they follow minimum standards of care [14]. Under the Ministry of Social Justice and Empowerment, the Government of India financially supports private de-addiction centres under various national schemes [14]. But unfortunately, most such centres, including many related NGOs (non-government organizations), apparently failed to sensitise the issue of ExDS and preventing disability or death.

#### **Custodial death Jurisprudence**

Custodial death refers to the deaths in prison, police custody, or custody of similar other authorities. The allegations of torture are commonly associated with custodial deaths. The recent Annual Report on Torture and the National Crime Records Bureau Report revealed almost 70% of custodial deaths are attributed to natural deaths in custody (from pre-existing morbidities like diabetes, hypertension) or other illnesses. This is followed by suicide or death from natural causes. Fewer (10-18%) cases are killed in an attempt to escape custody or road accidents during a prison transfer (NCRB Data, 2020).

International Protocols for torture and custodial deaths: The office of the United Nations High Commissioner for Human Rights released some international protocols that serve as manuals for the professional bodies, Istanbul protocol (2004), Minnesota Protocol (2016), etc., for effective investigation and documentation of torture, or extra-legal, arbitrary executions and cruel, inhuman, or degrading treatment by the states, authorities, or professionals. These protocols set standards for professional ethics, investigation procedures, securing evidence, and protecting witnesses.

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The National Human Rights Commission (NHRC) of India, an autonomous organization, proactively addresses torture-related issues, viz. custodial deaths, police firing, etc. It has issued clear and specific instructions to be followed in all human rights violation allegations across the country.

The Prevention of Torture Bill, 2018 was introduced in the Parliament of India in sync with the United Nations International Protocols for Human Rights Protection. This law has specifically added the definition of custodial torture and its punishment, viz. 'whoever, being a public servant or being abetted by a public servant or with the consent or acquiescence of a public servant, intentionally does any act for the purposes to punish or to obtain information from any person, whether in police custody or otherwise, which cause—

- A. grievous hurt to any person; or
- B. danger to life, limb or health (whether mental or physical) of any person, is said to inflict torture.

#### Guidelines to deal with custodial deaths [14,15]

The Supreme Court of India (in the landmark case D.K. Basu v. State of West Bengal, 1997) established the concept of custodial jurisprudence. It has issued some directives to be followed by the police and district administration in interrogating an accused person in custody:

- a) The use of third-degree methods or other such torture methods to extract information by the police or any other law enforcement authorities is not legally permitted in India. However, the rules are different and not the same case for other countries in the Indian subcontinent.
- b) The police officials who carry out interrogation and arrest must bear clear, visible and accurate nametags and identification along with their designation. Following this, particulars of all the officials should be maintained in a register.
- c) The arrestee or the detainee is granted a right to inform any relative about the arrest and the place of detention. Followed by this, the arrestee should also be informed about the offence committed and the rights vested with the detainee.
- d) The lawyer of the arrested person can be present at the time of interrogation but not throughout.
- e) The police must enter the detention register the name, place of the detention centre, the name of the relative of the arrested person, and the details of police personnel under whose custody he has been detained.
- f) A medical examiner should examine the arrestee at the time of arrest on his request. The doctor must record all injury marks in an inspection memo signed by both the arrested person and the concerned police officer. A copy of the memo should also be provided to the detainee.
- g) The arrested person should be sent for medical examination every 48 hours by a trained doctor approved by

the State Health Department.

- h) Further, a copy of all the documents, relevant entries, and memos should be sent to the area judicial magistrate for record within 24-hour of arrest (except on holidays).
- i) Police cannot arrest a woman at night except for a serious prima facie reason.
- j) The police officer must inform the police control room and the police superintendent about the arrest within 12 hours of the arrest.

This provision mandates the judicial or metropolitan magistrate to order the executive magistrate or the police authorities to conduct a parallel inquiry to send the body to the nearest civil or police surgeon or a medical officer within 24 hours for an autopsy. If the same is not possible, reasons must be recorded in writing.

### Conclusion

Usually, due to a lack of awareness, the clinical manifestations of the ExDS are often misinterpreted as deliberate violence by the patient. Hence, the healthcare staff or the police are compelled to restrain the violent patient rigorously. This sets a vicious cycle of rigorous and violent agitation. Hence, early recognition and aggressive emergency management are essential prerequisites in such cases to prevent the death of patients.

#### Recommendation

- A. Efforts should be made to sensitize the various aspects of ExDS to all concerned stakeholders, e.g., rehab or DC service providers (medical and paramedical staff), police, etc.
- B. Integrated, multidisciplinary, collaborative approaches should involve emergency physicians, psychiatrists, forensic pathologists, legal activists, media, police and other law enforcement officials/trainers.
- C. An ExDS task force may be formed considering these specialties/disciplines to formulate effective protocols/ strategies for early detection, diagnosis, and management of ExDS cases. The goals are to prevent ExDS related deaths or morbidity in custody.
- D. Unwarranted public chaos can be prevented by wide promulgation and mass sensitization through various channels, including the media.
- E. Furthering the research works is essential to get more information about ExDS.

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