

Pathology/Biology — 2018

H74 Mind Over Matter: A Death Potentially Related to Non-Epileptic Seizures

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The goals of this presentation are to: (1) review the clinical definitions of pseudoseizures, seizures, and epilepsy; (2) discuss a clinical case in which a young individual with a history of pseudoseizures died suddenly with no other identifiable anatomic or toxicologic cause of death; (3) emphasize the necessity of a thorough neuropathologic examination in cases in which a decedent may have had a history of epilepsy or pseudoseizures; and, (4) review the recommended sections that should be examined histologically at autopsy.

Psychogenic non-epileptic seizures, otherwise known as pseudoseizures, are well known to neurologists and psychiatrists, but are rarely encountered by forensic pathologists. This presentation will impact the forensic science community by reviewing the clinical and psychological aspects of pseudoseizures in comparison to true seizure disorders and discussing how the forensic pathologist should approach an autopsy of a decedent with a history of pseudoseizures. Non-epileptic seizures have not been thought to be a cause of death, but this case will raise the discussion of whether this is entirely true.

Non-epileptic seizures have an incidence of 2 to 22 people per 100,000 people. Many of the people who are diagnosed are worked up for epileptic seizures and have negative results. The seizures are thought to occur from psychological distress, as opposed to epilepsy, in which the seizures are brought on by electrical problems in the brain.

Presented here is the case of a 17-year-old female who was found unresponsive by her mother who then called Emergency Medical Services (EMS). EMS pronounced her dead at the scene. Reportedly, her feet were on the bed and her head was down in an adjoining closet with her face against a plastic bag.

Per medical records, the decedent was being followed for seizure-like events, approximately three to four events per week. An electroencephalogram was performed and reported to be normal and lab work was significant only for a low vitamin D level. The neurologist seeing the decedent diagnosed her with pseudoseizures, otherwise known as Psychogenic Non-Epileptic Seizures (PNES). These seizure-like events began after she had moved to a new place and only occurred when she was awake. There was no family history of epilepsy or neurological problems. Several days prior to her death, she was noted to have had a seizure-like event and knocked out a window with her foot. No major anatomic cause of death was found at autopsy. Postmortem toxicology was positive for therapeutic levels of sertraline and its metabolite.

A literature search was conducted in respect to non-epileptic seizures and death, of which there were no results. There is a link between Sudden Unexpected Death and Epilepsy, commonly known as SUDEP, but there was no known association with non-epileptic seizures. A discussion was had with the decedent's neurologist, who did not believe that non-epileptic seizures could result in death but may result in an inability to control the body. The mother of the decedent reported a plastic bag near the decedent's face, so it is possible there may have been an asphyxial component involved if the decedent had been having a non-epileptic seizure and her head fell near the bag.

Pseudoseizure, Epilepsy, Asphyxia