



Pathology Biology Section – 2009

G79 Death by Electrocution: Unusual Findings in a “Love Nest”

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After attending this presentation, attendees will realize the significance of a complete forensic examination of each case in order to understand the real cause of death. Sometimes the evidence found at the crime scene could lead examiners to misunderstand the cause of death, but only by collecting pathological, toxicological, immunological, and histological findings, you can be sure to correctly solve a case.

This presentation will impact the forensic science community by showing some unusual findings observed in an apartment that seemed to be a quiet love nest. Some of these findings seemed to suggest a different cause of death from the real one that was obtained through histological examinations.

A 63-year-old married man with two children was found dead in an apartment in a suburb of Bari, Italy. The apartment turned out to be a “love nest” of sorts, complete with nude pictures on the walls, erotic books, and pornographic videos and magazines. A large quantity of condoms and various types of sex toys were discovered in the drawers throughout the premises. None of the family members of this man were aware of this apartment.

The body was found completely nude, lying prone on the floor of the kitchenette with the knees and pelvis in a flexed position. On the wall were exposed electrical wires from the thermostat of the boiler, a tool drawer on a shelf, and screwdrivers and pliers scattered on the floor around the cadaver. External inspection of the body showed no presence of any significant traumatic lesions except for some oval, slightly depressed, yellowish, grazed areas on the back of the right hand and on the external malleolus of the right ankle which resembled parchment.

An autopsy revealed a diastasis between the IV and V cervical vertebrae with light hemorrhage of the soft tissue which probably happened just before the moment of death (*limine vitae*) due to the anomalous position assumed by the cervical roots after the victim fell to the floor into a very confined space. It was later discovered that the victim suffered from pre-existing cervical arthrosis. Immunological investigation was carried out on the suspicion that the death may have been the result of anaphylactic shock, but the findings were negative. Toxicological investigation showed the presence of nontoxic levels of Sildenafil (the principal active ingredient in Viagra®), along with high levels of some components of a cutaneous disinfectant used in the sterilization of medical surgical instruments.

These findings, which seemed quite curious, were attributed to the possible transrectal absorption of the substance, most likely used in the disinfection of some of the autoerotic instruments discovered in the apartment. In the end, the definitive diagnosis of the cause of death was arrived at by means of histological verification carried out on fragments of skin taken from the grazed areas of the right hand and ankle which showed signs of the passage of electrical current. In particular, it was the coagulative changes of the epidermis (i.e., cytoplasmic hyperesinophilia, lengthening of the nuclei) and congestion of the small blood vessels which suggested that the subject died of electrocution.

Electrocution, Sex Toys, Transrectal Absorption