



Pathology/Biology Section - 2013

G48 Homicide, Suicide, or Accident? An Unusual Case of Hanging Attempt

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After attending this presentation, attendees will be able to understand that sometimes the evidence does not necessarily correspond to what we think. Crime scene investigation needs a skeptical approach to evaluate the better way all the evidence is useful to establish the manner of death.

This presentation will impact the forensic science community by demonstrating the importance of a multidisciplinary competence in crime scene investigations that need a well-established methodology by forensic pathologists rather than emergency physicians or policemen that arrived before them and could misrepresent the evidence and autopsy findings in differential diagnosis between self-inflicted hanging and blunt lesions.

Hanging has many features in common with ligature strangulation. Death is, however, more often caused by reflex cardiac arrest from pressure on the carotid structures. It is difficult to evaluate the survival time after hanging; hence, if death is not sure, the physicians have to cut the rope to start resuscitation. Hanging's victims are generally found with pale faces, rather than the congested, hemorrhagic appearance of the slower asphyxia type of death. Most hangings are self-suspension. This may be carried out by a wide variety of methods, but a typical method of self-suspension is to attach a thin rope to a high point, such as a ceiling beam or staircase. The lower end is formed into either a fixed loop or a slipknot, which is placed around the neck while the intending suicide stands on a chair or other support.

The case presented is of a 32-year-old man who was found suspended from a balcony in a courtyard. Police and Emergency Medical Service (EMS) was called immediately but, physicians believed the man was dead when the crime scene investigation started. The right hand of the victim was grasping a node on the right side of the neck and the left hand was grabbing the unstable loop knot. After few minutes, the body fell to the floor and the ear started bleeding.

At external examination, a late-onset right orbital hematoma was found, suggesting a fracture at the skull base. The occipital region of the head showed a star-shaped lacerated wound. A typical hanging mark was evident around the neck, not completely encircling it because of the two gaps at the sides of the neck, for the interposition of fingers between noose and skin. The autopsy showed brain epi and subdural hemorrhage with skull base fracture. The histological analysis of the lung tissue showed alternating areas of alveolar collapse and overinsufflation by compensatory emphysema, typical of a slow asphyxia. No alcohol or drugs of abuse were found in the blood and urine collected at autopsy. All these findings demonstrated that the cause of death was due to traumatic cranio-cerebral injury which occurred when the subject was still alive, even if in agonal state following the hanging. Circumstantial data revealed that the victim was homosexual, and he was falling out of love with his boyfriend. In the past, he simulated other self-inflicted hangings, the last one occurring two days before his death.

The case was closed as an accident consequent of a suicide attempt. The manner of death and focus on possible liability of EMS personnel in determining death was speculated.

Hanging, Suicide, Crime Scene Investigation