



Pathology Biology Section – 2010

G85 Pseudostrangulation

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After attending this presentation, attendees will recognize autopsy findings that can be misinterpreted as due to homicidal strangulation. Attendees will also learn how to avoid making false positive determinations of strangulation in cases where the body is found dead at the scene.

This presentation will impact the forensic science community by instructing forensic pathologists how to avoid concluding falsely in any case that strangulation is the cause of death. Successful application of these concepts by forensic pathologists will prevent injustices that come from false accusations made by police officers and prosecutors – accusations that may lead to false convictions and imprisonments.

The investigation of the death of a person found unexpectedly dead is critically important. Prosecuting attorneys and police officers rely on the knowledge and expertise of the forensic pathologist to determine the cause and manner of such deaths. Unfortunately, the unwary forensic pathologist may misinterpret findings in the head and neck areas of the dead person at autopsy and falsely conclude that strangulation is the cause of death and that the manner of death is homicide. Incorrect determinations such as these all too often lead to the arrests of innocent people on false charges, to confusion in the courtroom with the presentation of misinterpreted evidence, and to false imprisonments. Even in cases truly involving foul play, a falsely positive determination of strangulation may lead to a misunderstanding of the chain of events that led to the violent death.

The classic and typical autopsy findings for manual or ligature strangulation are well documented in the literature and in forensic pathology textbooks, but simply relying on autopsy findings alone to reach a proper conclusion will lead to mistakes. Without knowledge of the witness evidence and other physical evidence in a case, a pathologist at the autopsy table may misinterpret certain head and neck findings, falsely concluding that they indicate homicidal strangulation. On the other hand, knowledge of the witness evidence and other physical evidence and the proper interpretation of this evidence will prevent the pathologist from being misled at the autopsy table.

Five general sources of confusion at autopsy will be presented. These include: (1) confusion of ligature marks with band-like discolorations from decomposition; (2) confusion of asphyxial findings with artifacts from postmortem hypostasis; (3) confusion of strap muscle hemorrhages caused by blunt or sharp force with strangulation; (4) misinterpretation of blood extravasations posteriorly placed within the neck; and, (5) misinterpretation of laryngeal petechiae.

The forensic pathologist may make an erroneous determination of strangulation when he or she attempts to surmise the past events that led to the physical findings disclosed by autopsy without regard to the statements of the witness or witnesses, particularly if the witness is the defendant. In this presentation, why that approach leads to mistakes will be demonstrated. The Also demonstrated is how to correctly test witness accounts with the physical evidence in order to determine if the witness accounts are truthful.

The cases and illustrations used in this presentation come from the author's forensic pathology consultation practice. The forensic pathologists who originally performed the autopsies concluded in each case that strangulation caused each of the findings.

Strangulation, Homicide, False Positive