



Odontology Section – 2009

F20 Three Bites and You Are Out

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After attending this presentation, attendees will learn how trauma can and will occur to a body after the fatal event. It may occur by the first responders, at the hospital, in transportation to the morgue, or in the morgue. Further, second and third opinions are not always valid.

This presentation will impact the forensic science community by demonstrating how opinions can go astray when the circumstances of the event and history are unknown to the odontologist. The problem is compounded when a second or even a third expert agrees with the errant opinion. If all the experts have all the facts and the evidence is scientifically sound, a correct opinion should be independently produced by all.

A differential diagnosis of a human bite mark requires more than a photograph of the injury pattern in the morgue. The odontologist should know the circumstances of the event. This should include the history, the time from the event to the time the photographs were taken, and all scene photographs of the victim. The scene photographs are important to document body position, clothing, jewelry, and any object that may produce a "pseudo" bite mark. In cases where first responders find the victim alive, scene photographs of the victim are not going to be taken. Photographs of the victim in the E.R. or recovery room are part of the whole picture that the odontologist needs to determine whether the injury pattern is a human bite mark or not. Cognitive thinking dictates that all pertinent information be known before an accurate diagnosis can be made. Common sense also plays a part in the odontologist's evaluation of a pattern injury to determine if it is a human bite and the proper orientation. There have been mistakes in diagnosis of a pattern injury as a human bite mark and then in the analysis and comparison to a suspect. The systematic and scientific evaluation using common sense and proper cognitive thinking will reduce or prevent mistakes. In several cases where mistakes have occurred cognitive thinking was replaced with emotional, irrational and unreasonable thought process.

Cognitive Thinking, Bite Mark, Odontologist