



LW4 Three in One Homicide Fire Victims: Dental Identifications the Hard Way

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Learning Overview: The goal of this presentation is to demonstrate (the principle of) diligence in forensic odontology for dental identification.

Impact on the Forensic Science Community: This presentation will impact the forensic science community by inspiring creative thinking in a seemingly unproductive investigation by reevaluating existing evidence from fresh and different perspectives, while revealing new evidentiary findings by interdisciplinary collaboration.

This principle is presented via related case illustrations and the demonstration of three burned-beyond-recognition fire victims. Diligence, far beyond the usual and customary, is required for this triple homicide scenario because no antemortem dental images or written records existed. More obstacles were present in this 1998 case because modern digital technology was not available to supplement data analysis that is commonplace today. Adding to objectives of diligence is the work ethic of dedicated problem solvers to re-think and create alternative approaches to a seemingly exhausted investigation when conventional methods become fruitless. The diligence becomes contagious for law enforcement and forensic professionals as a spontaneous cohesive devotion evolves and presents as an interdisciplinary team. They guide an effort that is focused and dedicated to the victims' family. Their analysis of the existing available and newly recovered data, in a very timely fashion, leads to the formation of accurate and positive outcomes in grieving circumstances.

The proposition of this presentation is to show that, in the absence of conventional data to perform a more standard human dental identification, with creativity, resourcefulness, collaboration with law enforcement, and scene trace evidence, scientists can yield successful results. The components of this previous statement alone can be considered a composite definition of diligence, dedication, and devotion.

The presentation synopsis is an individualized account of three, burned-beyond-recognition homicide fire victims. While each victim had some teeth missing that could have expedited a positive identification for each, the family reported that they extracted their own teeth. Consequently, no antemortem dental records were ever made and thus were not available for conventional antemortem and postmortem comparisons. Further, in this extraction technique, the teeth were made mobile slowly over weeks using left and right finger pressure movement on the painful tooth. This resulted in no root fractures and minimal trauma to hard and soft tissues, which then facilitated healing.

To conclude, the spirit of diligence, dedication, and devotion, fosters team building across all law enforcement and forensic sciences. This presentation reinforces and encourages an adage of older, experienced members to younger forensic sciences community members, guiding them to "think outside the box."

Dental Identification, Alternative Dental Records Search, Forensic Scientists' Collaboration