



G4 Dental Exclusion: What's Next? The Role of the Odontologist As Part of the Identification Team

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The goal of this presentation is to emphasize that dental identification is one part of the human identification team — even in single fatalities — and to advise attendees that even in cases of exclusion, the odontologist has a role to play in the identification process.

This presentation will impact the forensic science community by explaining that dental exclusions may occur for any number of reasons, including true exclusions, inaccurate antemortem dental information, wrong antemortem chart information provided to the odontologist, or even purposeful deceit. If an exclusion occurs, the role of the odontologist is not over. The odontologist must coordinate with the identification coordinator to facilitate identification by other means, if this is possible.

A man went missing in December of 2016. He borrowed a friend's vehicle for urgent business and was not seen alive again. The vehicle was found in May of 2017 in a farmer's field. The deceased was in the car in the front passenger seat, positioned facedown in the footwell with his legs extending into the backseat. The deceased was partially decomposed and partly mummified. Homicide was suspected. His hands were slightly mummified. His dentition was intact.

The purpose of autopsy in this case was to determine the means, manner, and cause of death — and identification. In the Province of Ontario, most identifications are performed by visual methods by family members or by circumstantial information. Scientific identification methods are preferred and include: dental comparison, fingerprint comparison, DNA, and medical/surgical devices. In all of the scientific methods, antemortem information is compared to postmortem data. In scientific identifications, a single identification method is most often used. In rare cases, multiple scientific comparison methods are performed for the same case.

What happens, then, when one scientific method contradicts another? Is there a mechanism for dispute resolution and how is this handled? This study presents a case in which comparison of antemortem and postmortem records resulted in an exclusion; however, the body was concurrently identified using fingerprint comparison and released to the family. After release, the forensic odontologist reported the possibility of exclusion to the identification coordinator.

At the time of dental exclusion, a Friday before a long holiday weekend and after the body had been released, there was still debate as to whether the body was properly identified or not. With that in mind, the odontologist decided to request that a number of stored blood samples that had been gathered for toxicology be set aside for DNA comparison. This was accomplished through communication with the identification coordinator.

Subsequently, DNA identification confirmed that the fingerprint identification was correct. The possible reasons for a dental exclusion will be discussed.

Identification, Exclusion, Identification Coordinator