G36 Identification by Photograph: A Case Presentation

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After attending this presentation, attendees will understand how to overlay and compare antemortem and postmortem photographs to make a positive dental identification.

This presentation will impact the forensic science community by demonstrating a method of dental identification when dental radiographs are not available or are insufficient.

Dental identifications are usually accomplished by comparing antemortem and postmortem radiographs. In the absence of this information, other methods of identification must be found: (1) non-dental, such as DNA or fingerprints; or, (2) other dental, such as written records or photographs. When making an identification by photograph, how to use the tools (e.g., Photoshop®) to make an accurate comparison must be understood.

In 1981, a young woman, Tina, went missing in south Florida. She had recently moved from Ft. Meyers, FL, to live with a man who promised her a modeling career. When her parents discovered this, they went to Hollywood and met with the man. With their approval, Tina remained with this man who was a photographer. One week later, Tina's sister notified Pembroke Pines police that Tina was missing and they had lost contact. In 1982, a skeleton was found in West Palm Beach, FL, the county just north of Broward County where Hollywood/Pembroke Pines is located. The skeleton was cataloged and, for 31 years, stored as unknown remains.

In April 2013, the missing person's case was reopened due to an inquiry by the victim's sister. Her son had alerted her that there were unknown remains in West Palm Beach which reminded him of his aunt's case. Tina's sister was able to provide several photographs showing dentition. Photographs of the skeleton were taken in similar positions to the antemortem pictures. Using Photoshop®, the pictures were adjusted to the size of the skeletal teeth. This was accomplished by using several points on the teeth and measuring the distances between them. The overlays were created using two techniques of the Photoshop® program. One used the opacity slide function; the other used the pencil drawing function to outline the teeth. Both were successful and the skeleton was positively identified as Tina.

This presentation will demonstrate methods used to overlay antemortem and postmortem photographs. This technique aids in dental identification in the absence or insufficiency of antemortem radiographs.

Dental, Photograph, Identification