



### **F11 A Retrospective of Forensic Cases: Identifications Aided by Medical Diagnostic Imaging**

*Haskell Askin, DDS, Philadelphia Medical Examiner's Office, 308 Van Avenue, Brick Town, NJ 08724-2535; and Sheila Dashkow, DDS\*, 7675 Maple Avenue, Pennsauken, NJ 08109*

The goal of this presentation is to provide the attendee with an alternative option to assist in the process of identification when dental charts and radiographs are not available. Forensic cases will be presented that will exhibit how varied forms of antemortem evidence were needed to assist in several different investigations.

This presentation will impact the forensic science community by providing alternate forms of antemortem data which may be useful to assist in a positive dental identification when antemortem dental radiographs may not be available.

The forensic odontologist, when called upon to assist in the identification of unidentified remains, is tasked to document any remaining dentition and surrounding oral structures. This would include a visual oral examination, charting of the dentition, dental radiographs, and photography of the case. Often this may require resection of the jaws to allow these tasks to be adequately performed. Obtaining this postmortem information is only the first step. Having adequate antemortem information then allows for comparisons to be made, which may result in an exclusion, inclusion, or positive dental identification. Forensic odontologists rely on the medical examiners or coroners and their investigators to provide this important antemortem information. There are situations where it is not possible to obtain antemortem dental information. Whatever antemortem records available may then have to be utilized to assist in this endeavor.

This presentation will exhibit several cases where this has occurred and successfully assisted in a positive identification.

Two case presentations involve missing persons cases. The first case is of a missing girl with a bite on the hand of the suspect. The detective was told that the teeth of the missing girl were needed to make a comparison. The suspect apparently realized this after his hand was photographed. When the girl was finally found, no teeth were present in

the jaw. The dental identification was made by a unique maxillary sinus combined with a curved root socket.

The next case is that of a young woman who disappeared with her baby daughter in January of 2003. Her car was found in the middle of the night, abandoned on a bridge. In April of that same year, remains were washed ashore near the area of the bridge. Antemortem dental records of the missing woman were not available. However, antemortem CT and MRI scans of the brain, taken years earlier, were provided and used to assist in a dental identification. This example was assisted by the unique features of her upper arch when compared to a cross section of the maxilla on the CT and MRI scans.

The remaining cases are related to a discovery of multiple bodies in a "House of Death." The victims of a serial killer were discovered piled upon each other as well as strewn within debris in a residence that the killer was forced to vacate due to a horrendous odor emanating from the apartment. Many of these identifications were made using hospital medical radiographs, as the victims were "women of the street," and had often been beaten and abused and taken to a hospital for treatment.

These cases will present practical examples of employing alternative antemortem resources to assist in a dental identification. **Dental Identification, Antemortem Records, Medical Radiographs**