



G6 What You See Is Not Always What You Should Believe: A Presentation of the Inconsistencies Commonly Seen in Antemortem Dental Charting

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After attending this presentation, attendees will gain understanding of antemortem dental charting practices and the inconsistencies, both intentional and unintentional, by a treating dentist as well as the potential negative effects on the dental identification process of the deceased.¹

This presentation will impact the forensic science community by providing examples of how charting inconsistencies, whether intentional or unintentional, can have significant effects on the human identification of dental remains by forensic dentists. This presentation will also strive to broaden the understanding of the importance of a systematic means to document and interpret dental charting in cases where a dental identification is necessary and will emphasize and enable an increased awareness that documentation inconsistencies can occur, demonstrating some of the most common charting inconsistencies according to the literature.

According to Zahrani, dental identification has become a vital resource for identification of human remains of mass disasters, acts of terrorism, severe mutilation, or burning of bodies. The identification of human remains has become essential for both legal and humanitarian issues.²

The human dentitions' uniqueness is what makes it such a benefit for identification purposes; the dentitions can also be so unique that charting a patient's dentition can make patient dental charting in the antemortem setting a somewhat subjective task to even the most scientific of dental practitioners. Such charting dilemmas can evolve as a result of irregular tooth development, shifting of dentitions, adaptive changes, and restorative work done by previous practitioners.

Problems in human dental identification frequently involve the lack of adequate dental charting, as some practitioners do not chart existing restorations but only chart work to be done or work that was completed. As the medical field is gradually moving to electronic health records, many dental practitioners still utilize handwritten records. Radiographic imaging is also a factor in regard to the antemortem dental records. Some patients may limit the amount of or even refuse to have radiographs taken. Some radiographs are taken with poor angling techniques or, in some cases, could be mounted or moved digitally to an improper position on the mounts or templates. The other major factor is human error. Human errors can cause significant inconsistencies in comparison analysis for dental identifications.

The problems and possible inconsistencies that will be identified in this presentation can result in delaying for many hours or possibly even days a positive identification of the deceased in order to provide a grieving family closure of a loved one's death.

References:

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2. Zahrani, A. (2005). Identification of Unidentified Human Remains-Validity of Dental Records. *Pakistan Oral and Dental Journal*, 25(1), 3-6. Retrieved July 1, 2014, from [http://www.podj.com.pk/PODJ/Vol.%2025%20\(1\)%20\(June%202005\)/25-01-03-06.pdf](http://www.podj.com.pk/PODJ/Vol.%2025%20(1)%20(June%202005)/25-01-03-06.pdf)

Dental Identifications, Dental Charting, Inconsistencies