



G38 Fire, Fraud, and Forensics: A Complex Case Study in Dental Identification

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The goals of this presentation are to create a better understanding of the importance of dental records in a multi-victim fatality event involving children and to explain the necessity for open, professional communication between the treating dentist and the forensic dentist for an expedient result to the identification process.

This presentation will impact the forensic science community by illustrating the need for effective communication and cooperation between professionals involved in forensic cases and by exposing some of the ethical challenges faced during attempts to definitively identify victims in high-profile, tragic events.

On February 23, 2012, a tragic house fire claimed the lives of five victims, four of which were children. Multiple techniques were required to identify the victims due to an absence of antemortem dental films for two of the children and the adult, and fraudulent dental treatment notes for three of the four children. The techniques included: (1) age estimation to differentiate two of the children who were under the age of five years; (2) the use of distinctive dental characteristics, antemortem photography, and exclusion criteria to identify the adult; and, (3) the use of a law enforcement agency to definitively identify that three of the children's antemortem dental treatment notes were fraudulent.

The case discussion includes: (1) antemortem records review; (2) identification of the child victim; (3) age estimation techniques/procedures; (4) communication between the treating dentist and the forensic dentist; (5) deciphering fraud in the dental record; (6) ethical considerations for reporting fraudulent dental/medical records; (7) working under close media scrutiny; and, (8) lessons for community out-reach and education.

The sequence of events unfolded as follows. Initially, the Middlesex County Medical Examiner's Office obtained incomplete dental records for three of the children, all of whom were treated by the same dentist. The incomplete records contained panoramic dental radiographs of two of the children taken 11 months prior to the fire. A second request for the complete antemortem dental records was then made. The dental autopsies were begun using the incomplete records. After reviewing the antemortem radiographs, two of the victims were positively identified; however, when the additional dental records were received prior to the completion of the postmortem examinations, discrepancies existed between the dental treatment notes and the postmortem findings. The dental treatment notes indicated that multiple restorations were placed on all of the patients under the dentist's care after the date(s) of the antemortem X-rays. In fact, the restorations were not present in the postmortem examinations of any of the victims.

Upon completing the postmortem examinations, attempts to contact the treating dentist via telephone were made. The sole purpose of directly contacting the dentist was to rectify the discrepancies between the dental treatment notes and postmortem examinations so that accurate identification of the victims could be made. The dentist did not answer any questions that were asked during the phone conversation that would clarify the antemortem records, nor did he return any additional phone calls made at the behest of the medical examiner. Due to the absence of a response from the dentist, the assistance of the Middlesex County Prosecutor's Office was requested. The investigation that was subsequently launched led to the arrest of the dentist. The delay in identification of the victims caused by the discrepancies between the dental records and the postmortem examinations led to a media storm.

Ultimately, the two older children were positively identified by X-ray comparison, the two younger children were differentiated via age estimation, and the adult victim was identified by exclusion criteria and known individualizing characteristics captured in antemortem photographs. The dentist pled guilty to three counts of fraud and one count of obstruction. He was convicted, sentenced to two years of probation, and levied fines. The dentist is currently being investigated by the New Jersey State Board and the Attorney General's Office for Medicaid fraud.

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