



G8 How the Characteristics of One Tooth Were Used to Make a Dental Identification in a Burn Victim: A Case Report

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The goal of this presentation is to show how the characteristics of a single tooth were used to help make a positive dental identification of the partial remains of a burn victim.

This presentation will impact the forensic science community by sharing an interesting case where a partial maxilla and seven teeth were the only oral structures found on charred remains and by discussing how a single tooth's characteristics and dental treatment helped make a positive identification of the body. Other single tooth dental identifications have been reported by the forensic dentistry community and it has been noted that said tooth should possess a quality that would set it apart from others, thus eliminating the possibility of a misidentification.

A burned body was discovered at a beach in Puerto Rico inside the trunk of a burned car. The personnel from the Institute of Forensic Sciences of Puerto Rico were called to the scene and recovered the charred remains. These were believed to be the remains of a young man who had recently been reported missing. Using the car's license plate, the car was traced to a family member of this young man, thus reaffirming the possibility of the remains belonging to this person. An interview with the family of the presumed deceased provided the name of the dentist who treated this person. Personnel from the Institute of Forensic Sciences in Puerto Rico requested the dental record and radiographs from the dentist.

Upon examination, the remains were found to be mostly broken down into small, very burned pieces. The anterior part of the maxilla was found in two pieces with some teeth still in their sockets. Other teeth, including three maxillary molars whose crowns were observed to be partially destroyed by the fire, were found in the remains. Digital radiographs, using a hand-held X-ray machine, were taken of these oral structures. A dental autopsy was performed. The antemortem and postmortem radiographs and dental information were compared. Only one tooth, #11 (using the universal numbering system), was found to be in both sets of radiographs and have enough structure left to make a comparison. Antemortem radiographs showed that a root canal treatment had been performed by the dentist. They also revealed a root dilaceration. Both of these notable features provided comparison data, leading to the conclusion that the anatomy and dental treatment performed on this one tooth should lead to a positive identification of the victim.

Dental Identification, Single Tooth, Puerto Rico