



## Odontology Section – 2005

### F1 Jane Doe: The Odontologist's Role in Identification of an Unknown Decedent

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The goal of this presentation is to present to the forensic community a description of the role of an odontologist in identification of an unknown person when no other information is available. This presentation will impact the forensic community by providing a protocol or template to facilitate data integration and ultimately identification with scant ante-mortem information.

This presentation will impact the forensic community and/or humanity by providing a protocol for identification of an unknown victim where antemortem data is not available.

Occasionally, the odontologist is called upon to aid in the identification of an unknown decedent. Frequently, there may be no information available in order to do a standard analysis and comparison of dental radiographs. Thus, the dental analysis becomes but one piece of a larger pool of information that may be used to expedite the identification.

Other sources of information may be the forensic pathologist's report, police report, witness report, or anthropological report. These bits of information may be meaningless when evaluated alone, but when all data is collated and compared to missing persons' reports or other data based information sources, it could provide the needed answers.

By case example the author will attempt to describe a protocol for identification using all possible sources of analyses, such as pathology, missing persons' reports, NCIC, local, state, and federal data bases, anthropometric measurements as well as postmortem dental information. Often, these cases lay dormant for many years until a key piece of information is obtained. It is imperative for all investigators to be diligent in their analyses and interpretation of their findings. Dental radiographs may be of paramount importance and must be accurate and detailed in their analysis. All findings must be recorded in the appropriate databases.

The odontologist may be working independently of others. In the case example provided, this investigator had the luxury of participation in a team of experienced medicolegal professionals. Many forensic disciplines were represented and able to collaborate. My function was to collect as much dental information as possible.

The dental analysis may give clues as to the country of origin, if recognizable restorations of a particular culture or prevailing dental materials or methods can be observed. Further, age and race may be inferred by consulting with established charts. Other pertinent information may be the time of death, location, cause and/or manner of death. In this example the forensic anthropologist had made a substantial contribution by providing a possible "sketch" of the unknown based on certain class characteristics. Hair analysis was also performed.

One must consider that the victim was found along a major highway and could really be from anywhere.

Once all data is collected and reported, one could turn to a national database and search by key words, such as "rose tattoo" or "gold incisor." While these may be great distinguishing characteristics, it is usually not that easy. First of all, the victim needs to be missed by someone so that a report or file can be generated. It is difficult to identify someone if critical data about them does not exist. Second, unusual identifiers are not always present or reported. Third, attempts may be made to conceal the person's identity, such as removal of clothing, documents, or destruction of soft tissues by fire or other means. Lastly, one must consider the possibility of an individual who is in this country unlawfully, and thus no information whatsoever exists.

Using the authors' example, a protocol will be established to demonstrate the process by which all investigators could use to follow the submission of evidentiary information, follow its progress, and reach a logical conclusion based on scientific methods for identification. Actual case history will be discussed, as well as the methods used by all disciplines involved in cases such as this. Photographs will be included as part of a flow-chart design.

**Identification, NCIC, Anthropology**