



Physical Anthropology Section – 2007

H103 Examination of Identification Methods Used by Medical Examiners: A Facility Study

Angela Soler, BS*, and Todd W. Fenton, PhD, Michigan State University, 354 Baker Hall, East Lansing, MI 48824; and Joyce L. deJong, DO, Sparrow Hospital, 1215 East Michigan Avenue, Lansing, MI 48909

After attending this presentation, attendees will learn of the various categories of identifications made at Sparrow Hospital Forensic Pathology Section, Lansing, Michigan from a one year period.

This presentation will impact the forensic community and/or humanity by increasing awareness of the difficulties that arise when differentiating between positive and presumptive identification. The goals of this presentation are to discuss the necessity for a more solid understanding of the term "positive identification", and to introduce the prospects of another category of identification.

Positive identification is a somewhat loosely defined term that has been described in a number of different ways by scientists of varying backgrounds. Most would agree that positive identification is a scientific classification that compares known antemortem records with postmortem records of the deceased in order to determine whether or not they represent one and the same individual. This definition can be quite accurate for biological means of identification, such as fingerprinting, DNA, and comparative dental or medical radiography.

Presumptive identification, on the other hand, is defined as a nonscientific method that would "put either a likely or tentative name on a decedent, or at least put the decedent into a smaller subgroup" (Baker 2005). Both physical and non-physical characteristics, such as tattoos, scars, personal effects, location of body, and verbal testimony can be used to make the case for a tentative identification (Burns 1999). Many scientists would include in this category those identifications made by visual recognition.

Although the definitions of positive and presumptive, or biological and nonscientific, identifications are somewhat clear-cut, the cases that come into the medical examiner's office most often are not. Perhaps the current forensic definitions of 'positive' and 'presumptive' identifications are too simplistic to be applicable to the real world. Many factors impact the necessity for a more thorough investigation, such as whether a decedent was found within their own home, whether they were recognized by family members, and whether they exhibit a number of corresponding features. One question that is often asked is whether a very strong presumptive identification, with a preponderance of corresponding non-unique characteristics, can be considered a positive identification. If the answer is yes, then how many circumstantial points would add up to make a positive identification? If not, then should another category of identification be created to hold all classifications that are defined as neither positive nor presumptive? A third category, introduced in this paper, will be labeled "identification by multiple corresponding factors" and will include all identifications made by a multitude of non-scientific evidence, such as biological profile, location of body, tattoos, identification papers and others.

This study aimed to quantify the number of positive and presumptive identifications that were made in a one year period at the Sparrow Hospital Forensic Pathology Section in Lansing, Michigan. 796 cases from the year 2005 were reviewed and the type of identification was recorded and then placed into one of two corresponding categories: positive and presumptive. Biological identifications, such as fingerprints, DNA, and medical and dental radiographic comparisons were placed within the positive category, whereas identifications made through visual and multiple corresponding factors were placed within the presumptive category. Percentages were then calculated to determine what type of identifications were made the most.

Results indicate that the largest percentage of identifications were made visually. Of those identifications made visually, the vast majority also included multiple corresponding factors, such as clothing, jewelry, and personal effects, etc. The second most common identifications were made through multiple corresponding factors. These identifications varied in strength depending on the number and quality of factors contributing to the identification. The next commonly made identifications were through dental radiographic comparison, followed by fingerprints, medical radiographic comparison, and finally DNA. This demonstrates that non-scientific means of identification were the most common and easiest obtained identifications. Despite the majority of non-scientific identifications, most would agree that all of these cases were identified, although the literature would state that they were presumptive.

In conclusion, these results indicate the necessity for a discussion about positive and presumptive identification. If the cases presented at the Sparrow Hospital Forensic Pathology Section in Lansing, Michigan are any indication of the kinds of identifications being made in medical examiner's offices across the country, then there is obvious necessity for more clear-cut definitions of positive and presumptive identifications, as well as the possibility of the introduction of a new category of identification.



Physical Anthropology Section – 2007

Human Identification, Forensic Anthropology, Forensic Pathology