H1 Skeletons in the Medical Examiner's Closet: Realities and Merits of Investigating Human Skeletal Remains Undergoing Long Term Curation in the Medical Examiner's Office

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The goal of this presentation is to illustrate the scientific and educational value of studying the "cold" case in forensic anthropology.

This presentation will impact the forensic community and/or humanity by encouraging qualified forensic anthropologists to inventory and study (in some cases, restudy) "cold" cases undergoing long-term curation in Medical Examiner's offices or other such facilities.

Miscellaneous collections of forensically significant unidentified human skeletal remains are commonly curated over a substantial period of time in Medical Examiner's offices and other such facilities across the nation. Many of these are considered "cold" cases due to the absence of significant leads in these cases in several years. Others may be donated or unclaimed remains or those transferred from other facilities (e.g., Sheriff's offices, Police department closets). It is paradoxical that while the general public may perceive these cases as intriguing (with considerable potential for being "solved"), many professionals may see them as scientifically uninformative due to the inherent problems plaguing them. These problems often include an absence of contextual information concerning the derivation of the remains. It may not be known when, where, or even under what circumstances the remains were found, for example. In addition, key evidence may have deteriorated or been compromised in the intervening years—witnesses, relatives, and perpetrators may no longer be available, and linking evidence between each of these lost. Finally, the longer the period of curation, the greater the effect of physical deterioration on the remains themselves; there is also a greater chance of compromising their remaining contextual integrity.

Given these limitations, it is not surprising that these cases may be treated as lower priority. While it is true that the odds of resolving many of these older cases are significantly lower than more recent ones, the value of these "cold" cases is more subtle and far-reaching.

The objective of this presentation is the documentation of both national and regional difficulties and benefits of inventorying and studying these types of cases. The prevalence of these "cold" cases as well as their status is assessed nationally through a cross-sectional survey of medical examiners and forensic anthropologists across the country. On a regional level, the Virginia State Office of the Chief Medical Examiner, Western District, in Roanoke, Virginia, serves as a model for the kinds of cases which may be present in other such facilities. A survey of the collections housed within this office reveals a wide range of case types, histories, and degrees of contextual integrity. Systematic study of these cases over the past four years has resulted in the compilation of data with significant scientific and educational merit in at least three ways. First, forensic case reports (detailing basic vital statistical information for each case) have been completed and placed on file at the Roanoke Medical Examiner's office for future reference in the event that these cases become active again. This can, in fact, stimulate renewed interest and investigation of these cases. Second, these cases have scientific research value in that they expand the known range of human skeletal variation—they represent males and females of diverse ages, races, and pathological states and as such may aid the development and testing of new methods of forensic skeletal analysis and the validation of existing ones. Intensive study of the antemortem and perimortem pathologies which are manifested on these cases (including trauma and anomalies) give insight into the identification and differentiation of these conditions as well as the processes responsible for them. Likewise, observation of postdepositional effects on these remains enhances our understanding of the taphonomic pathways which they and other skeletonized remains endure. Finally, a third benefit derived from these cases is in the realm of education. These bones have been used as "practice" forensic cases for students enrolled in osteology and forensic anthropology courses at Radford University and can be an invaluable hands-on teaching tool for the young forensic scientist seeking to gain on-the-job experience. In sum, the oft-abandoned "cold" curated forensic case has much to offer in terms of its educational and scientific value and warrants further investigation.

Forensic Anthropology, Cold Cases, Education

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