

## **Odontology Section - 2015**

## G31 Forensic Dental Examination of Disinterred 19th-Century Archaeological Remains

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The goals of this presentation are to distinguish between archaeological remains and more recent burials and to compare and to contrast dental restorative treatment from the 19<sup>th</sup>, 20<sup>th</sup>, and 21<sup>st</sup> centuries.

This presentation will impact the forensic science community by discussing the historical significance of forensic dental information from 19<sup>th</sup>-century dental remains.

The discovery of gold along Whitewood Creek in the fall of 1875 led to the settlement of Deadwood, SD. Deadwood's first cemetery was established out of necessity for the proper disposal of human remains. This cemetery was originally located about one-quarter mile from Deadwood's central business district. It is unknown who established the cemetery or when the first burial occurred, since newspapers in the town were not established until June of 1876. Nevertheless, many of the town's newspapers provided news articles and obituaries about individuals buried in the original cemetery. The first cemetery did not have a formal name and was referred to by many names, including "the Deadwood Cemetery," "cemetery on the hill," "City Cemetery," and "old graveyard in South Deadwood." As a matter of fact, a newspaper article once referred to the cemetery by two different names on the same day. The creation of Mt. Moriah Cemetery in 1878 led to the downfall of Deadwood's first cemetery; however, after the establishment of Mt. Moriah Cemetery, Deadwood's first cemetery would be called "Old Deadwood Cemetery."

Approximately 122 individuals were buried in Deadwood's first cemetery from 1875 to 1878. In June of 1877, one newspaper reported there were 80 burials in the cemetery. Two noteworthy individuals buried in the first cemetery included James Butler "Wild Bill" Hickok and Methodist minister Henry Weston Smith. Both of these individuals were later exhumed and reburied in Mt. Moriah Cemetery in 1879 and 1883, respectively.

In the spring of 2006, construction workers discovered human remains while in the process of replacing a retaining wall and the unearthed remains were sent to Minnesota for forensic analysis. It was determined that the individual was an adult male who was approximately 25-34 years of age and stood 5'4"-5'8" in height. The ethnic origin was determined to be Asian, Mongoloid, or Native American. This individual was reinterred in the Mt. Moriah Cemetery on July 28, 2010. A monument was placed on the grave that acknowledged the possible Native American and Chinese heritage of this individual.

In March of 2012, construction workers unearthed a fully articulated coffin burial while replacing a retaining wall at 66 Taylor Avenue in Deadwood. At that time, both Deadwood Historic Preservation officials and South Dakota State Archivists were on hand to exhume the burial. They found approximately 99% of the skeleton, with the exception of one tooth and a few finger and toes. The remains were subsequently transported to a forensic anthropologist for analysis. It was determined that this individual was a white male of 18-24 years of age and was 5'4"-5'8" in height.

After a forensic anthropologic analysis, the remains were transported to Marietta, GA, for a forensic dental analysis. This analysis was conducted on March 1, 2014, and the results will be discussed in detail. Despite multiple forensic analyses, no cause of death has been determined.

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