



## Physical Anthropology Section – 2006

### H39 The Difference Between “Pala” and “Palo” is the Instrument of Death

*Turhon A. Murad, PhD\*, Anthropology Department, California State University, Chico, CA 95929-0400*

After attending this presentation, attendees will better come to appreciate the value of detailed taphonomic observation, eyewitness accounts, and the value of both a gross morphological and microscopic analysis of bone.

This presentation will impact the forensic community and/or humanity by demonstrating the use of subtle skeletal features of trauma to corroborate a questionable eyewitness account.

In late 2004 the remains of a mysterious death were brought to the attention of the Washoe County Coroner, Reno, Nevada. The case involved two other Nevada counties, and ultimately six agencies from three states. It addressed the kidnap and murder of a 33-year-old Hispanic female, an eyewitness account offered by the victim's three-year-old non-English speaking son, and the assistance of both a gross morphological and microscopic skeletal analysis in corroborating the questionable eyewitness. Additionally, various taphonomic factors became important to the case.

During the morning hours of November 10, 2003 a young middle-aged woman dropped her son off at an elementary school in Carson City, Nevada. Later that day another son, a three-year-old, was found bloodied, clutching a dollar bill, in a parking lot at a supermarket in Lyon County, 15 miles east of the school. The three-year-old told authorities that a man had stuck his mother over the head with a “pala” and drove off after placing his mother in the back of his truck.

Eight months later, on September 14, 2004 a middle-aged man reported that his dog had discovered some bones in a rural portion of Churchill County, a few miles further East of the supermarket. Sheriff's deputies investigated the call and soon found the remains of a partially mummified, buried, and burned body. Blunt force trauma to the head was suspected as the cause of death and over the next few weeks DNA positively identified the remains as the mother. On September 28 the Washoe County Coroner's Office of Reno, NV delivered the remains to the Physical Anthropology Human Identification Laboratory (PAHIL) at California State University, Chico. The authorities were particularly interested in confirming the cause of death, but more specifically the nature of the bludgeoning instrument.

While the DNA analysis was performed a typical morphological/forensic anthropological examination of the remains revealed a classic appearing female who had died between the ages of approximately 30 and 40 years. The decedent's age was assessed from the degree of dental development and wear, the recent closure of the sternal ends of both clavicles, and the lack of vertebral osteophytes. While both morphologically and discriminant function analyses suggested the victim was of White ancestry, slightly shovel shaped incisors were noticed on teeth numbers 7, 8, and 9. Furthermore, the decedent's stature was estimated at 60.5 + 2.3 inches. In addition to extensive evidence of blunt force trauma to the head and thorax a unique cut-mark was encountered on the upper left humerus, just proximal to a burned area and proximate spiral fracture. A microscopic analysis of the cut revealed various small associated fractures as well as a laterally directed hairline fracture. The combination of these features as well as what was deemed an appropriately wide kerf was used to suggest that a heavy dull-bladed instrument, perhaps a shovel, had been used in striking the bone. The possible use of a shovel to create all of the trauma was then reported to the Nevada authorities. At that time the investigating officer reported that the then identified victim's three-year-old son, who did not speak English, had said that his mother had been beaten with a “pala”. However, due to both the witness' age and confusion in the term's translation the authorities were not certain if a shovel or “pala” had been the bludgeoning instrument, or a club, or “Palo.”

The skeletal analysis suggesting the use of a shovel was accepted as affirmation that the young boy had used the Spanish word “pala.” When the suspect was confronted by investigators with the evidence he began to express remorse and on December 9, 2004 he was found dead in a jail cell in Salt Lake City after having hung himself with his bed sheets.

#### **Blunt Force Trauma, Cut-Marks, Taphonomy**