



Physical Anthropology Section – 2010

H35 Patterns of Trauma on the Skeletal Remains of U.S. Soldiers in the Battle of East Chosin, North Korea

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After attending this presentation, attendees will examine a specific pattern of peri-mortem/early postmortem trauma detected on the skeletal remains of U.S. soldiers lost in the Battle of East Chosin, Democratic Peoples' Republic of [North] Korea (D.P.R.K.). Multiple hypotheses regarding the possible sources of the majority of this trauma will be presented and examined.

This presentation will impact the forensic science community by broadening the understanding of battlefield trauma derived during the Korean War, as it documents a pattern of apparent deliberate skeletal alteration of remains after death by non-U.S. forces.

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The mission of the Joint POW/MIA Accounting Command, Central Identification Laboratory (JPAC-CIL) is to recover and identify the remains of U.S. servicemembers lost in recent conflicts, including the Korean War (1950-1953). Over 8,000 U.S. servicemembers are currently missing/unrecovered from this conflict. One of the largest battles occurred around the Chosin Reservoir. This large reservoir was the location of a U.S./Republic of [South] Korea (R.O.K.) advance far into North Korea at the end of November 1950. The night of November 27 saw the beginning of a massive attack by divisions of the Chinese People's Army, which over subsequent days led to over 3,000 U.S. and R.O.K. casualties as their forces were pushed back in disarray south of the reservoir and subsequently toward the current border with South Korea. The rapid withdrawal and loss of unit cohesion caused the majority of the dead to be left behind, either buried by U.S./R.O.K. forces or left for enemy forces. The severe winter cold and heavy snow further reduced opportunities for burial of these remains.

Multiple recovery missions from 2001 until 2005 have excavated battlefield sites in the East Chosin Reservoir area and recovered skeletal remains and associated artifacts identified as U.S./R.O.K. in origin from primary and secondary burials. Bone preservation in most cases is sufficient to allow detailed analysis of skeletal trauma. Peri-mortem trauma, largely in the form of gunshot wounds, is common among the remains recovered from the chosin area and other locations in North Korea. An additional pattern of trauma has been identified: sawing or massive blunt force trauma to humeri, usually with the portion of the arm distal to the trauma still associated with the remains. The indications of sawing trauma include clear kerf formation, straight cuts, and residual striations. Blunt force trauma could have been caused by multiple implement types, with unknown duress applied to soft tissue to allow limb removal. These remains likely were in a frozen state when altered, with access to remains at the base of open burial features restricted and alteration possible only to those remains near the top.

Of a sample of $n = 26$ left humeri, 12 (46.2%) exhibited this trauma pattern (three sawing/probable sawing, and nine massive blunt force). Of a sample of $n = 24$ right humeri, five (20.8%) exhibited this trauma pattern (three sawing/probable sawing and two massive blunt force). In addition, definite sawing trauma was detected on one femur and one nasal region, and similar blunt force trauma also occurred on three left and two right lower arm portions (radius or ulna). This pattern of differential peri-mortem arm trauma is mirrored in the larger sample of all U.S. remains recovered from North Korean battlefields or received by unilateral turnover, where a marked underrepresentation of lower arm portions (i.e., distal to the proximal humerus) has been detected previously.

The origin of this trauma is most consistent with the deliberate cutting or other dismemberment of these remains by enemy forces, with the possible aim of trophy acquisition or other systematic defacement of U.S./R.O.K. remains. Rejected hypotheses include coincidental peri-mortem battlefield trauma, the removal of extended frozen limbs to expedite burial in small burial features, differential skeletal preservation of these elements, and battlefield amputations by U.S./R.O.K. medical staff. This trauma could have occurred immediately after the withdrawal of U.S./R.O.K. forces or months later, given the frozen state of these remains.

Battlefield Trauma, Korean War, Chosin Reservoir