Trauma and Trepanation during the Early Intermediate Period and Middle Horizon in the Callejón de Huaylas

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INTRODUCTION

Cranial surgery, specifically trepanation, was performed in the Andes for over two millennia (Verano 2003). Trepanation involved removing a piece of cranial bone to relieve intracranial pressure caused by the injury; however, it was also done for other reasons, such as in cases of neurological or psychosomatic disorders (Andrushko and Verano 2008). This study describes 9 examples of the practice from two sites (Aukispukio and Hualcayán) in highland Ancash, Peru, that likely date to the Early Intermediate Period and the Middle Horizon (AD 1-1000). At Aukispukio, the human remains were collected from two machays and one chullpa; at Hualcayán, the samples were excavated from three machays and one subterranean tomb that has been dated to 546-643 AD.

Aukispukio

Aukispukio, a large Recuay settlement, is located on a ridgeline in the Callejón de Huaylas at 3800 masl (Lau 2011). Six km south of Aukispukio is Hualcayán situated on a stopping plateau at the base of a steep mountainside at 3200 masl. Sharply arched 51 crania from Aukispukio and 81 crania from Hualcayán for evidence of trepanation and, when present, noted the trepanation morphology, location, extent of healing, and associated trauma. Trepanation data collection was undertaken according to methods outlined by Verano (2003), and additional osteological data (e.g., sex and age-at-death) were recorded according to established protocols (Buikstra and Ubelaker 1994).

Hualcayán

In Ancash, central Peru, that likely date to the Early Intermediate Period. The most common reason for the procedure was to alleviate the effects of head trauma from blunt objects. The frequencies of trepanation and the types of this surgical procedure are not well known.

Aukispukio

Hualcayán

DISCUSSION

Results indicate that 9.8% (5/51) of observed individuals at Aukispukio and 4.9% (4/81) at Hualcayán show evidence of trepanation. When sex and age could be determined, all affected individuals were adult males. There is no clear preference for side (i.e., right or left). Previous studies indicate a bias for the left side (Kurin 2013, Verano 2001), both modified and unmodified crania were affected. The majority of cases exhibited long-term healing (8/9=66.7%), and 7 out of the 9 cases have at least one antemortem trauma on the cranium. Of those 7, only 3 wounds can be considered in direct association with the trepanation.

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