

Paleopathology and Mortuary Variability in the Pre-Hispanic Chaco Canyon

Kerriann Marden, Smithsonian Institution, Washington, DC

This presentation includes three cases of pathological conditions in skeletal remains from prehistoric Chaco Canyon, New Mexico, ca A.D. 850-950. These cases demonstrate the range of observable pathological conditions in this small burial population, and help to provide a sense of the health conditions at this prehistoric site. The first is an adult female who exhibits several skeletal lesions characteristic of treponemal infection, including stellate lesions on the cranial vault, a classic gummatous lesion on the tibial shaft, and lesions involving the nasopharynx and the clavicular shaft.

The second individual is a very young adult female who has skeletal defects consistent with healed stage IV Legg-Calvé-Perthes disease. The capital femoral epiphysis is necrosed unilaterally, with significant remodeling of both the femoral head and acetabulum, although the capitus is in the correct anatomical position in relation to the femoral neck, and the neck length is normal. There are notable differences in shaft diameter between the affected leg and its unaffected antimerere, consistent with muscular atrophy and altered gait expected with untreated Perthes' disease.

Lastly, a third individual exhibits a pair of circular, lytic foci on the cranial vault that probably result from a metastatic carcinoma. The proximal right femur from this individual also appears to show some osteoclastic activity in the cancellous bone, although there is also blastic periosteal reaction in this bone. These three cases are among several pathological conditions observed in this burial population, which, taken together, help to paint a clearer picture of life and death in the prehistoric Southwest. When these conditions are considered in relation to archaeological indicators of the method and location of disposal of the bodies, we can also glean cultural information about the perception of disease in Chaco Canyon.

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