Bone analysis reveals violent history of pre-Hispanic Mesoamerica

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(Phys.org)—A pair of archeologists with Arizona State University has found evidence of different types of bone treatment among people that lived at the La Quemada archaeological site approximately 1,500 years ago in what is now modern Mexico. In their paper published in *Proceedings of the National Academy of Sciences*, Ben Nelson and Debra Martin describe their findings after studying bones excavated from the site.

The research pair looked at bones from the site dating back to 500–900 C.E. and discovered the remains of those who had died or were killed were treated very differently depending on whether they were from their own people or were those of enemies. Bones found inside the compound, they noted showed signs of being treated with respect, whereas those outside were not only abused, but showed evidence of cannibalism.

During the time when the people were living there, the researchers note, the area was under stress, enduring upheaval due to rapid change—Teotihuacan city had collapsed and a new society was under development, one that consisted of multiple smaller scale groups living across the Northern Frontier. That inevitably led to violence, which the researchers note, can be seen in how the bodies of the vanquished were treated. The bones show marks indicative of cutting and were also splintered and sometimes burned—all signs of both abuse and cannibalism. They also found skulls with holes bored in them, which seems to suggest they were hung for still living enemies to see, a means perhaps, of warding off further attacks. Other evidence of the violence that occurred was the architecture itself, fortresses meant to keep invaders at bay.

Meanwhile, bones found inside the compound showed signs of a different kind of cut marks—shallow indentations, which generally are attributable to defleshing and desiccation, both signs of veneration of the dead. That suggests those people were loved ones, in some cases, possibly even ancestors, rather than immediate relatives.

The researchers suspect that the much of the conflict between groups in the area at the time was ethnically based, but will need to do isotopic and DNA analysis to confirm their theory.

**More information:** Symbolic bones and interethnic violence in a frontier zone, northwest Mexico, ca. 500–900 C.E. Ben A. Nelson, [DOI: 10.1073/pnas.1422337112](https://doi.org/10.1073/pnas.1422337112)

**Abstract**

Although extensive deposits of disarticulated, commingled human bones are common in the prehispanic Northern Frontier of Mesoamerica, detailed bioarchaeological analyses of them are not. To our knowledge, this article provides the first such analysis of bone from a full residential-ceremonial complex and evaluates multiple hypotheses about its significance, concluding that the bones actively represented interethnic violence...
as well as other relationships among persons living and dead. Description of these practices is important to the discussion of multiethnic societies because the frontier was a context where urbanism and complexity were emerging and groups with the potential to form multiethnic societies were interacting, possibly in the same ways that groups did before the formation of larger multiethnic city-states in the core of Mesoamerica.