Sex-related Inequality in Mesolithic Societies from Northern Iberia: A Diet and Mitogenome Study in Hunter-Gatherers

Abstract:

It has been suggested that gender may be one of the factors to influence the inequality in the access to resources in hunter-gatherer communities. In this scenario, we present the analysis of the diet and mitogenome reconstruction from a Late Mesolithic female found in Aizpea rock shelter (Navarre, northern Iberia). Carbon and nitrogen stable isotope results on bone collagen and tooth caries detected in the Mesolithic female of Aizpea compared to other Mesolithic hunter-gatherers of the northern Iberian Peninsula, indicate that some Mesolithic females of the north of the Iberia could have had a diet based mostly on plant resources, whereas the diet of the males would have been based generally on animal resources. This difference could be due to limitations in the access to some resources for socio-economic reasons linked to sex inequality. Furthermore, the Mesolithic female of Aizpea carried a unique mitogenome, since it has not been found in any other prehistoric or current individual. Moreover, haplogroup U5b1, which the mitogenome of Aizpea's female belongs to, has not been detected in today's human population, despite being highly frequent (67%) in hunter-gatherer females. We suggest that the loss of Aizpea's mitogenome could have been caused by the presence of selective pressures in females who carried specific mitochondrial genomes.

Keywords: *Mesolithic, hunter-gatherers, isotopes, diet, mitogenome, sex-related inequality.*