"Celts" up and down the Alps. A multi-isotopic exploration of mobility among the pre-Roman population of Verona (NE Italy, 3rd -1st c. BCE)

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Abstract

During the Late Iron Age (4th-1st centuries BCE) Europe was interested by intense migratory processes across the Alps. In this period, several "Celtic" populations settled in the Italian peninsula. So far, only scarce data are available about mobility in these communities. In this work, we explore mobility patterns among the Cenomani population of Seminario Vescovile (SV-Verona, Italy, 3rd-1st c. BCE) through a multi-isotopic perspective and test the possible correlation between mobility, sex, age and funerary treatment.

We analyzed isotopic ratios of oxygen ($\delta^{18}O$) and carbon ($\delta^{13}C$) from bone phosphate and collagen, respectively, of 49 individuals (23 males, 17 females and 9 nonadults). We also compared collagen $\delta^{13}C$ from bone and dentine of 26 individuals. We assessed nonlocality based on individual deviation of isotopic values from the population mean plus three times the median absolute deviation from the median ($\pm 3MAD$). We then checked for isotopic differences between sexes and type of funerary treatment using Mann-Whitney tests. A nonlocal origin can be proposed for one individual and cautiously suggested for five more individuals. No statistical difference separates sex nor funerary treatment based on isotopic values. Results highlight a local origin of most of the individuals of SV with few individuals that may point to an Alpine origin. The degree of mobility at SV is lower compared with other contemporaneous sites of Europe, a result that can be attributed to chronological and social factors but also to methodological differences with previous studies.

Funding citation: This research was supported by a Swiss National Science Foundation grant to Marco Milella and Albert Zink (grant number: 10531FL_197103 / 1).

Keywords: Late Iron Age; Celtic populations; Alps; mobility patterns; stable isotopes