

ANCIENT DNA ANALYSIS OF EARLY MEDIEVAL ALAN POPULATIONS OF THE NORTH CAUCASUS

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The earliest existing written evidence about Alans – people of Ponto-Caspian steppes and Caucasus region of I-XIII century AD – is found in the works of Chinese authors who mention the politonym "Yancai" in the "Records of the Grand Historian" and in the "History of the Former Han", and of European antique authors in the middle of the 1st century AD.

Genetic data of the early Middle Ages Alans and their affinities to the Scythian-Sarmatian tribes, traditionally considered as their ancestors, as well as to the modern population of Europe and the Caucasus have not yet studied thoroughly, the whole genome data exists for only 6 individuals [1].

In this study we have analyzed ancient DNA of 70 individuals from 12 burial complexes belonging to the Alan culture from the III-XIII century AD, from the territory of the North Caucasus (Russian Federation). DNA was extracted from the archaeological material (teeth, temporal bone) of 70 individuals. We produced low-coverage Illumina whole-genome shotgun sequencing data for 63 individuals and will analyze these in a context of ancient and modern genetic variation of the region. The coverage of the genomes was 0.0004-0.3X (median coverage 0.045X and content of endogenous DNA 21,45%). The preliminary analysis allows us to assume close contacts of the Alans with the populations of the North Caucasus. The Y-chromosomal palette of Alans consisting of 5 different haplogroups (R, Q, J, G, I) started to be similar to that of present day autochthonous North Caucasus populations only in the later phase of Alan culture.

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Keywords

Ancient DNA, Alans, Haplogroups, Caucasus, Middle Ages

Note/comment

1. Damgaard et al. 2018, Nature <https://doi.org/10.1038/s41586-018-0094-2>