

TREPANATION AMONG THE NOMADS OF CENTRAL KAZAKHSTAN (8TH-3D CENTURIES BC)

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Burials with stone mounds, which gave the name to the archaeological culture of Tasmola ("Stone Grave") are being investigated by archaeologists in the very heart of Kazakhstan. Tasmola sites date to the 8th–3d centuries BC and are mainly located in Central Kazakhstan, though some parallels are found in southeastern Urals and in southern Siberia. The study of skeletal materials excavated over the past several decades resulted in assembling a large collection of ca. 60 individuals of good preservation. Ten male and one female crania demonstrated trepanation holes, all of which are located on the occipital or on the posterior part of parietal bones. The number of trepanations varies between one and 15 per skull. Similar cases have been recorded in the past, but only two concern crania of the same chronological and cultural background. The pattern of trepanations in Central Asia can be related to embalming rites, which have also been recorded in the Pazyryk Culture of the Altai. We assume that in our case perforations were made for ritual purposes and were post mortem, as no traces of healing on male crania were identified. While differing in appearance, trepanation cases from Central Kazakhstan may indicate proximity of the ideological views of Tasmola people to those held by people in Western Siberia, Mongolia, and China, although at the moment it is hard to define the purpose of such operations in Tasmola people. The diameter of holes is too small for brain extraction, and absence of obliteration suggests non-medical purpose of the intrusion. Perhaps, this could be explained by the specificity of the funeral rites of the early nomads Central Kazakhstan. Notably, in this case trepanations were performed on individuals of high social position, buried with golden artifacts, under large mounds. These features can indicate the flourishing of mummification and postmortem cranial autopsy rites in the early Iron Age population of Central Asia. Further analysis of similar manipulations could significantly expand our understanding of the death rituals in the ancient world.

Key words: *trepanation, Early Iron Age, Central Asia, Central Kazakhstan, death rituals*

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RESULTS OF AN INTEGRATIVE ANALYSIS OF METRIC AND NONMETRIC TRAITS IN CRANIA FROM THE MEDIEVAL CEMETRY AT MAMISONDON, NORTHERN CAUCASUS

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The paper focuses on the biological affinities of the medieval population of Mamisondon, the Alagir district, Republic of North Ossetia–Alania. Because the cultural affiliation of Mamisondon people is controversial, biological data can provide important information on the origin and population history of that group. We used data on two morphologically independent systems of traits: craniometric and cranial nonmetric. First, cranial measurements of medieval and modern groups from northern Eurasia including Mamisondon were subjected to canonical variate analysis (CVA) whereas frequencies of nonmetric characters of the same groups were subjected to the principal component analysis (PCA). Next the resulting CV and PC scores were treated as new traits and integrated using PCA. The results of both analyses, metric and nonmetric, are consistent despite the independence of both trait sets. The correlation coefficient between CV 1 and PC