As a result of the 1986–1990 excavations, the expedition of the Institute of History, Language and Literature, Ufa Scientific Centre, RAS, under the guidance of A.Kh. Pshenichnyuk, investigated burial complexes of the nomadic elite accompanied by unique sculptures of the gold-plated deer and other pieces of jewelry. The excavations also gave craniological material consisted of five skulls (including 3 male and 2 female skulls) of varying integrity. Craniometric investigations along with morphological and total analyses of the male skulls from Filippovka showed a mixed origin of their anthropological type. The male skulls are characterized with large size, brachycrania, well-developed macrorelief, high face, slightly weakened profiling at the level of the orbit and small or medium projection of nasal bones above the facial plane. This combination of craniological features observed in paleoanthropological materials of the 5th and 4th centuries AD from the East European steppe region has been determined as “eastern Europoid type”. Two male skulls and one female skull from Filippovka formed the craniological basis for plastic facial reconstructions. Typologically, the basis for the racial type of the buried men from Kurgans 5 and 12 of the Filippovka kurgan cemetery is represented by a complex of Protoeuropoid traits with a slight addition of Mongoloid peculiar features in the facial architecture. Weakened profiling of the facial skeleton at the horizontal level can be explained by preservation of the archaic features in the Protoeuropoid-type morphological complex. The female skull from Kurgan 12 is characterized with a more pronounced Mongoloid appearance that is reflected in the facial reconstruction sculpture. In the process of restoring the appearance, M.M.Gerasimov’s method was employed with further modifications proposed by G.V. Lebedinskaya and S.A. Nikitin.

Key words: *Nomads of the South Urals, Filippovka, craniology, plastic facial anthropological reconstruction*

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ESTIMATION OF WATER SECTORS IN HUMAN ORGANISM BY BIOIMPEDANCE METHOD

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Diagnostic possibilities of a method of multifrequency segmentary bioimpedance analysis were studied in 125 practically health patients. It is shown that in the age range from 25 till 75 years and BMI (Body Mass Index) in the range from < 20 kg/m2 up to >35 kg/m2 the decrease in impedance parameters occurs, more significant at arms and legs regions. Ranges of normal bioimpedance values are established at low frequency (LF) and high frequency (HF) for body regions at various BMI values and for different age groups. The degree of correlation of the revealed changes of impedance values at LF and HF varies for different body parts and is most ly expressed on upper extremities. As the degree of changes of impedance parameters varies, their analysis for separate body regions is necessary. The suggested values can be used as references for individual and estimation of human body mass parameters in adults.

Key words: *organism, water balance, anthropometry, bioimpedance analysis*

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